

THE CONNECTIVE SERVICE

A Research Laboratory for the
University City Science Center
in Philadelphia, Pennsylvania

by

Peter J. Batchelor

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Submitted to the Department of Architecture on January 17, 1987
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ABSTRACT

This thesis explores the idea of the conduct of science and how people come together in order to share knowledge in the working place. The building is a framework or setting for activities that support the ideas of scientific inquiry.

The seven story building on a street corner in West Philadelphia is divided into horizontal zones or realms. The ground floor is dedicated to retail trade allowing for the continuous net of city activity to pass through the building. The main entry is narrow in order to avoid interrupting this continuous city net. The second and third floors are dedicated to bankers and brokers, the industry which is both private and public. The upper floors house the private research laboratories. Elevators carry scientists to these upper levels. In order to encourage gathering and exchange among scientists, a sky lighted stairwell links the three floors. In addition, on the north side is a meeting room from where scientists might gather to exchange ideas. The view from the meeting room is to the east, towards city hall and the central business district, symbolic of their relationship to the larger world beyond their own world of scientific inquiry.

Thesis Supervisor: William Hubbard
Title: Assistant Professor of Architecture

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UNIVERSITY CITY SCIENCE CENTER

UNIVERSITY CITY SCIENCE CENTER

The University City Science Center (UCSC), the nations first and largest urban research park, is currently home to 80 science and technology related businesses. The research park consists of nine buildings with two more presently under construction and a third in the planning stages.

The Science Center, located next to Penn and Drexel campuses, has operated for 22 years. The concept of the Science Center was based on two objectives. One, as an urban renewal project, ie. to clear away the older buildings near Penn and Drexel and two, make it possible for local talent to contribute to the area's economic development by allowing them a base environment from which to do consulting work. Space science, technology and commerce are areas where the Center has a role to play in the national and local economies. This base environment believes Dr. Randall M. Whaley - president of the Science Center, "is critical, when it comes to helping the entrepreneur."

The University City Science Center contains four divisions. They are the following:

1) Research Park Division: Houses for-profit companies, research groups and government agencies.

2) Research Institutes Division: A combination of nine groups which mostly

have ties with university research projects.

3) Advanced Technology Center of Southeastern Pennsylvania: Three primary areas of interest a) joint research and development b) intreprenurial development c) education training. Its role is to spur economic development through technological innovation.

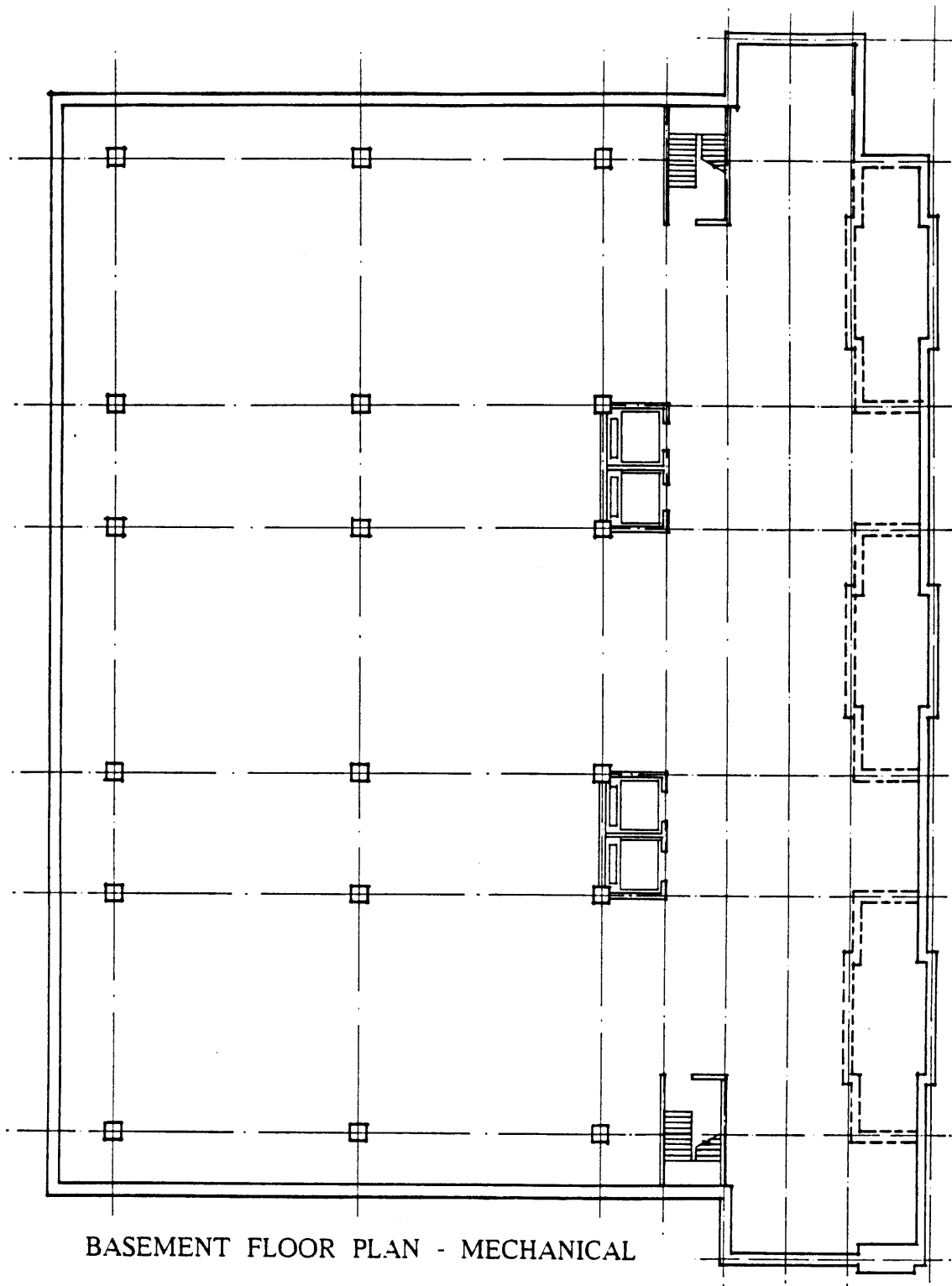
4) Business Development and Venture Management Division: Provides business and technical assistance to entrepreneurs and scientists who have a new product or idea to form the basis of new companies.

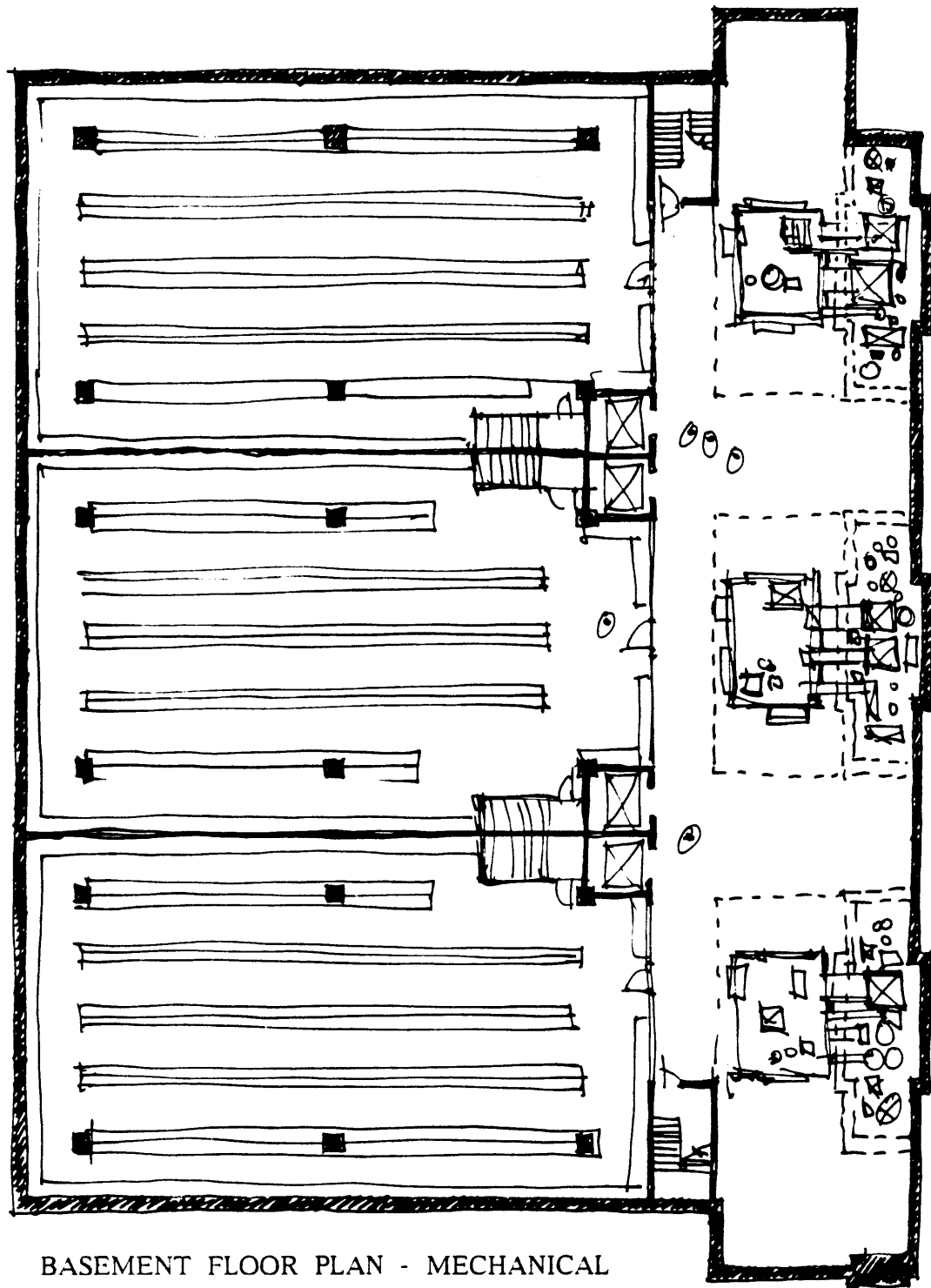
It should be noted that both Division 2 and division 3 are research groups and the relationship between them is complex but related. "If there's an overlap from one area to another at the Center, we'll accomodate that. And we want it to happen. The way you encourage synergy is to get people working together," says Dr. Barry F. Stein - director of Research and Development. "We have so many diverse elements in the Science Center, you have to recognize areas where they're complimentary, and act to bring them together."

FINAL DESIGN

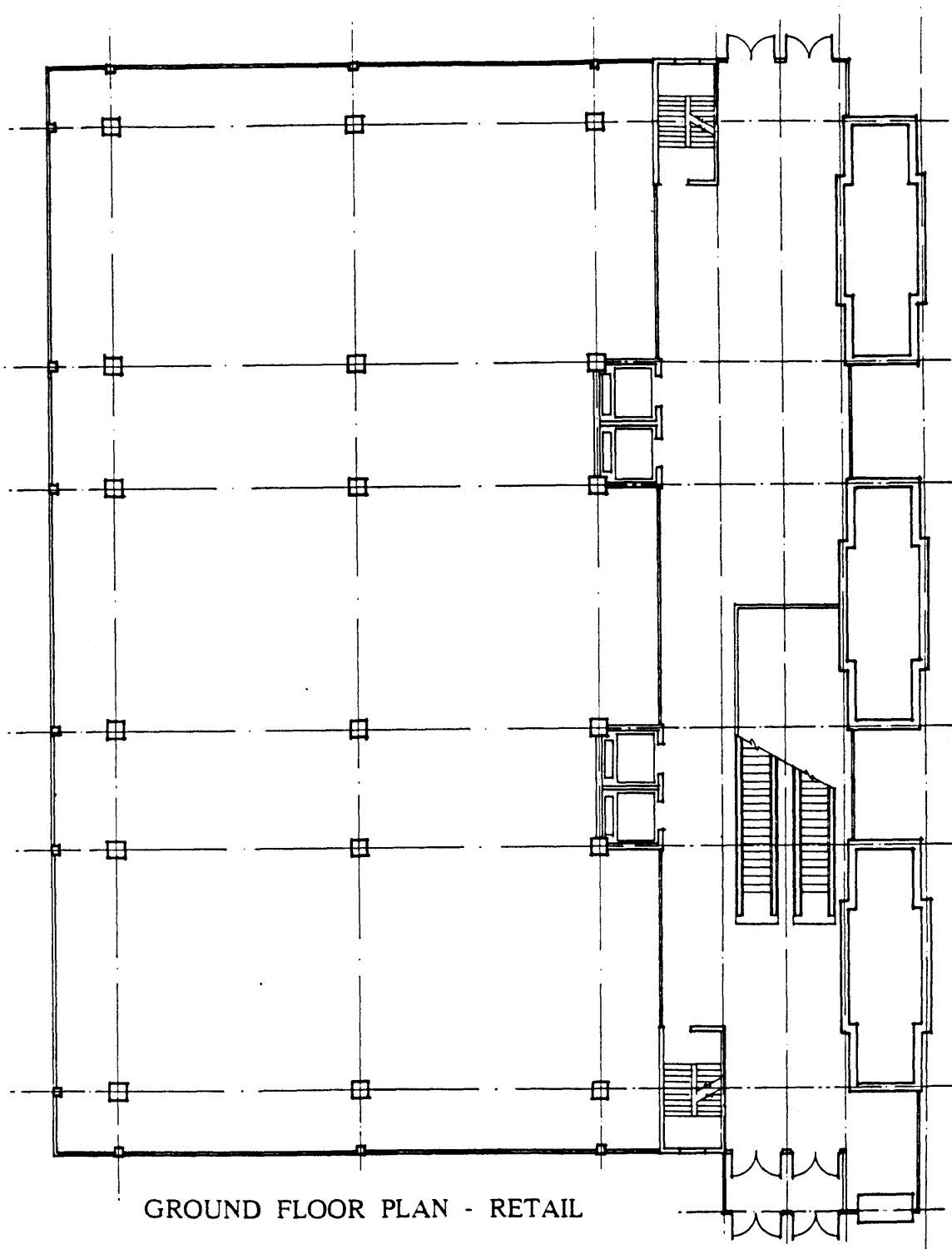
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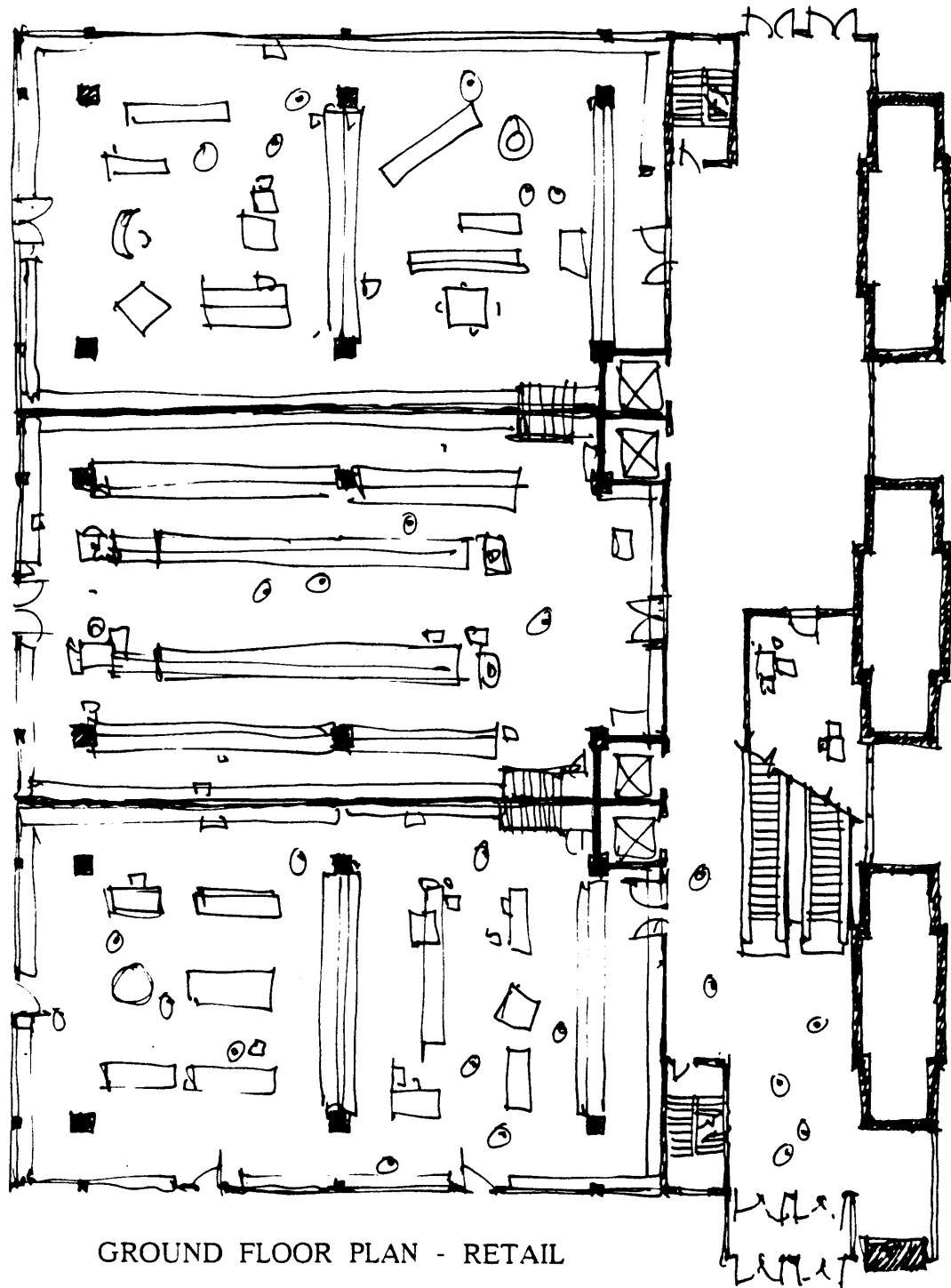
- FLOOR PLANS
- ELEVATIONS
- SECTIONS

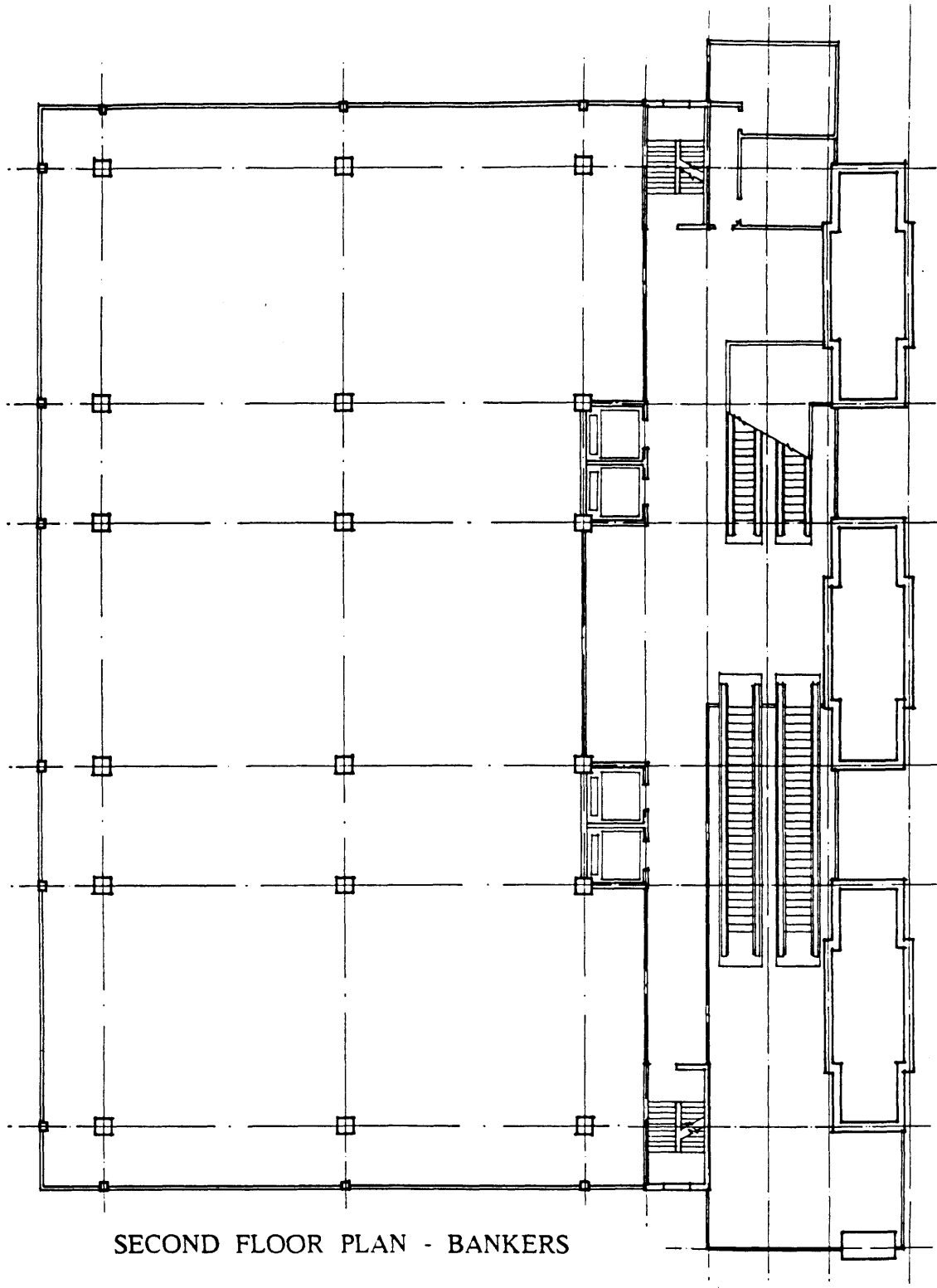


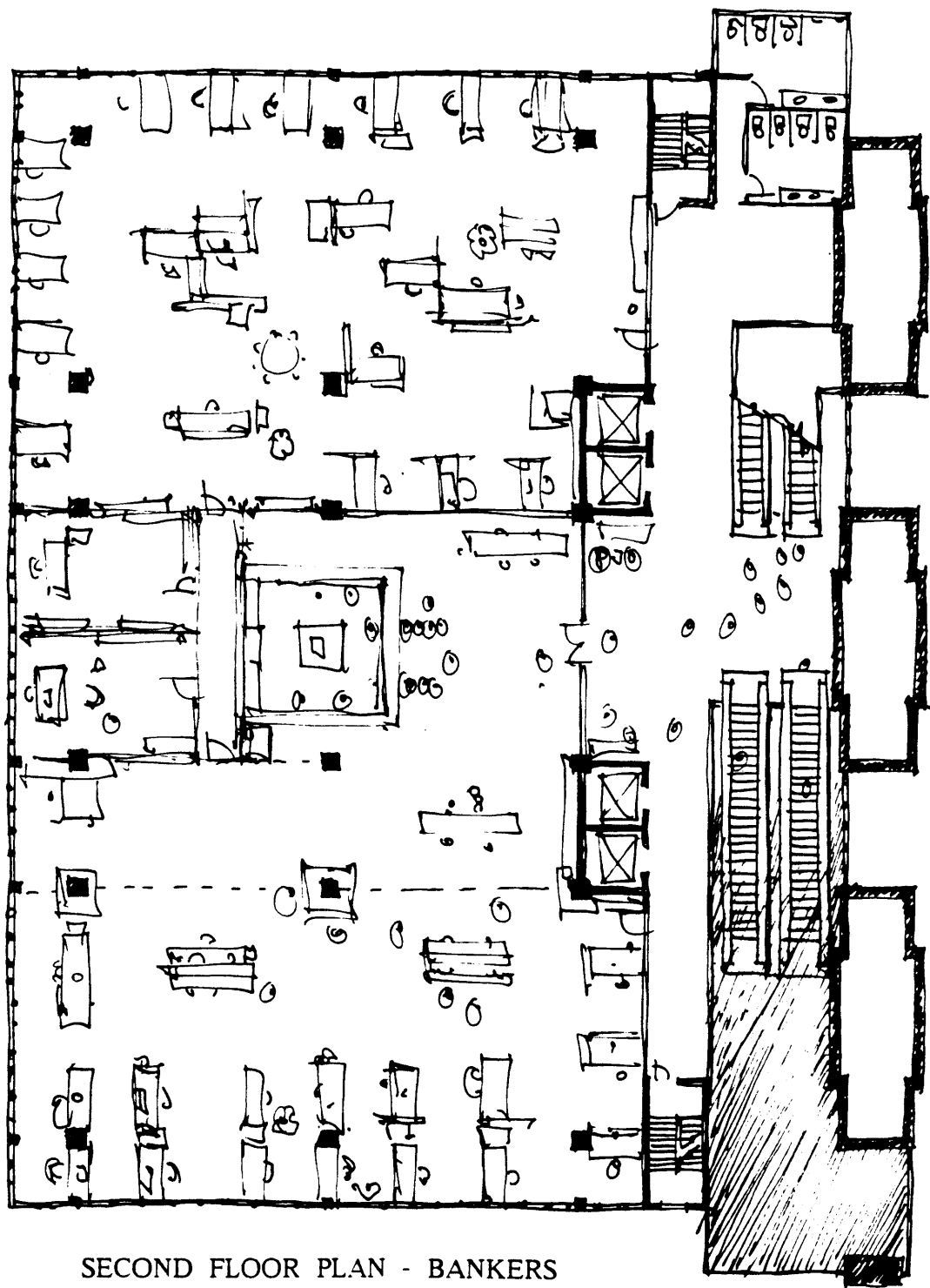


BASEMENT FLOOR PLAN - MECHANICAL

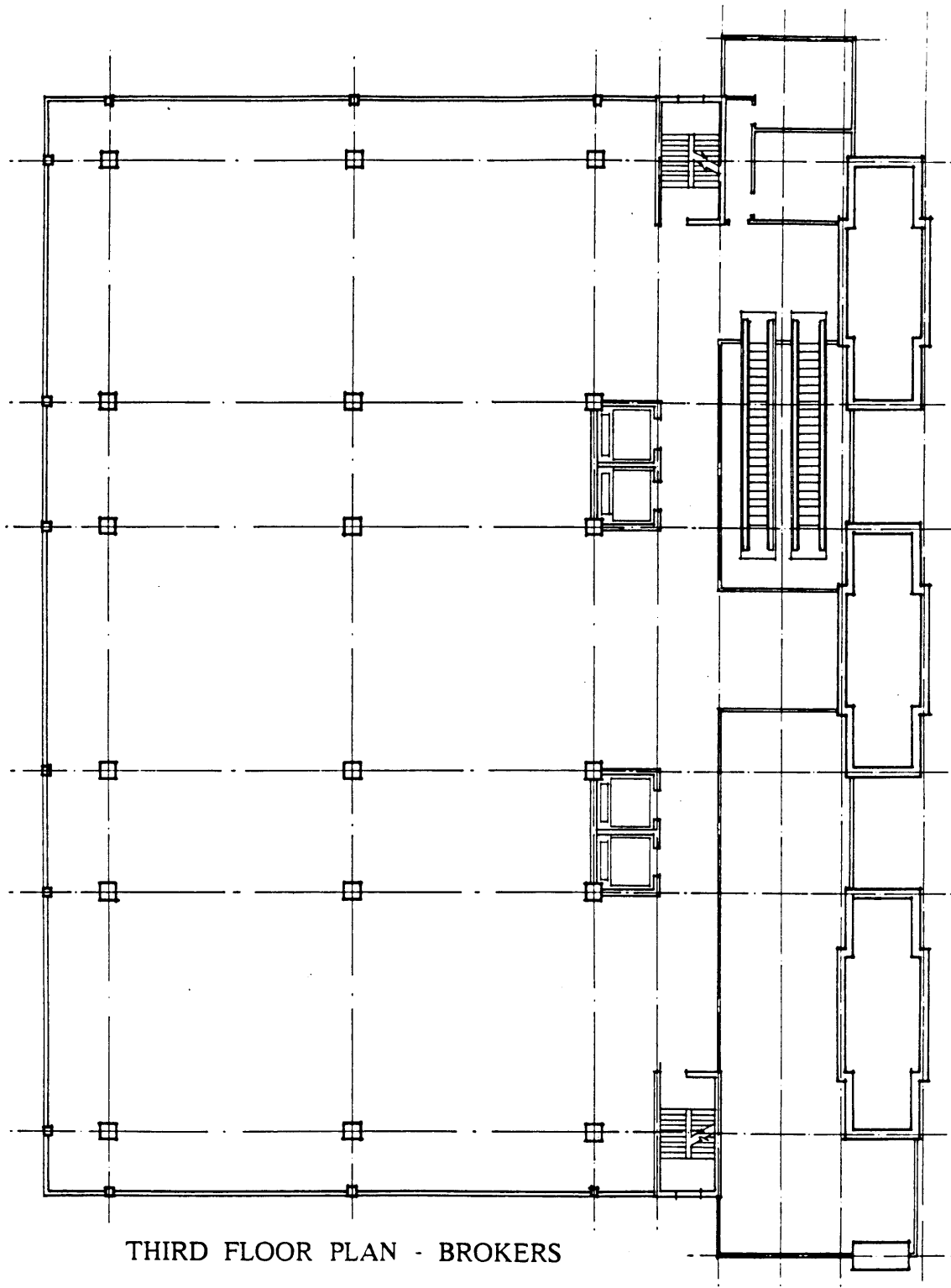


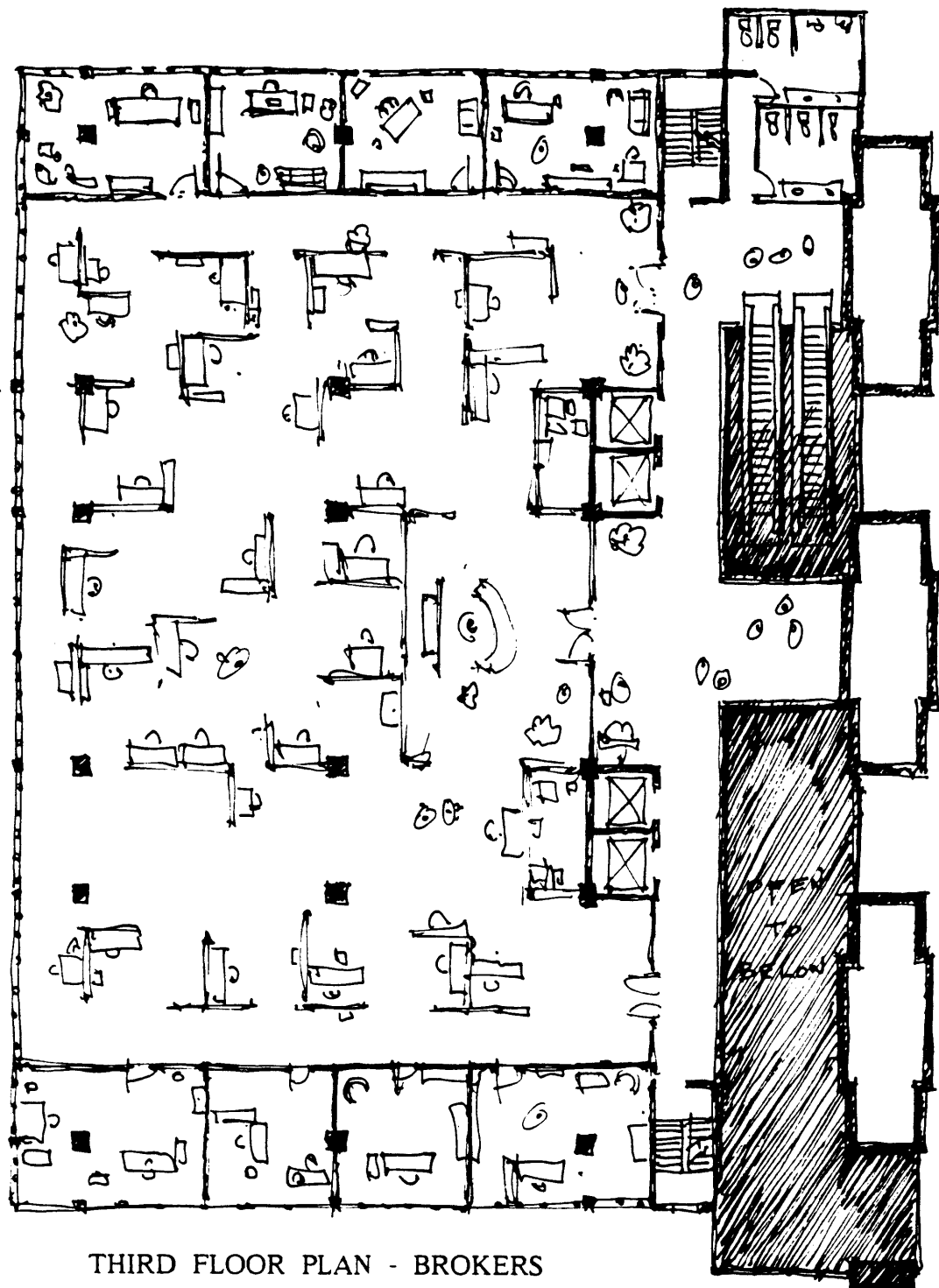




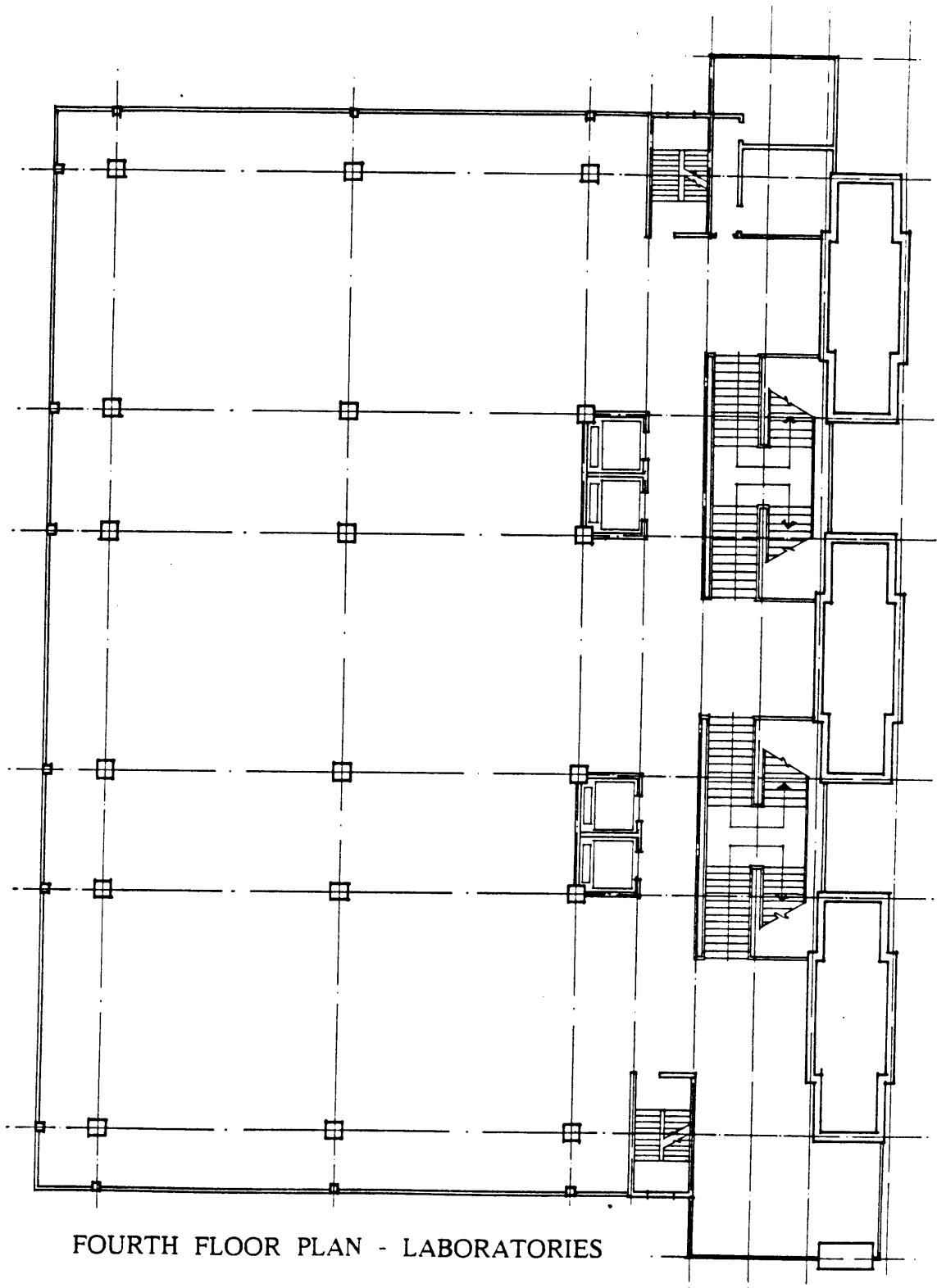


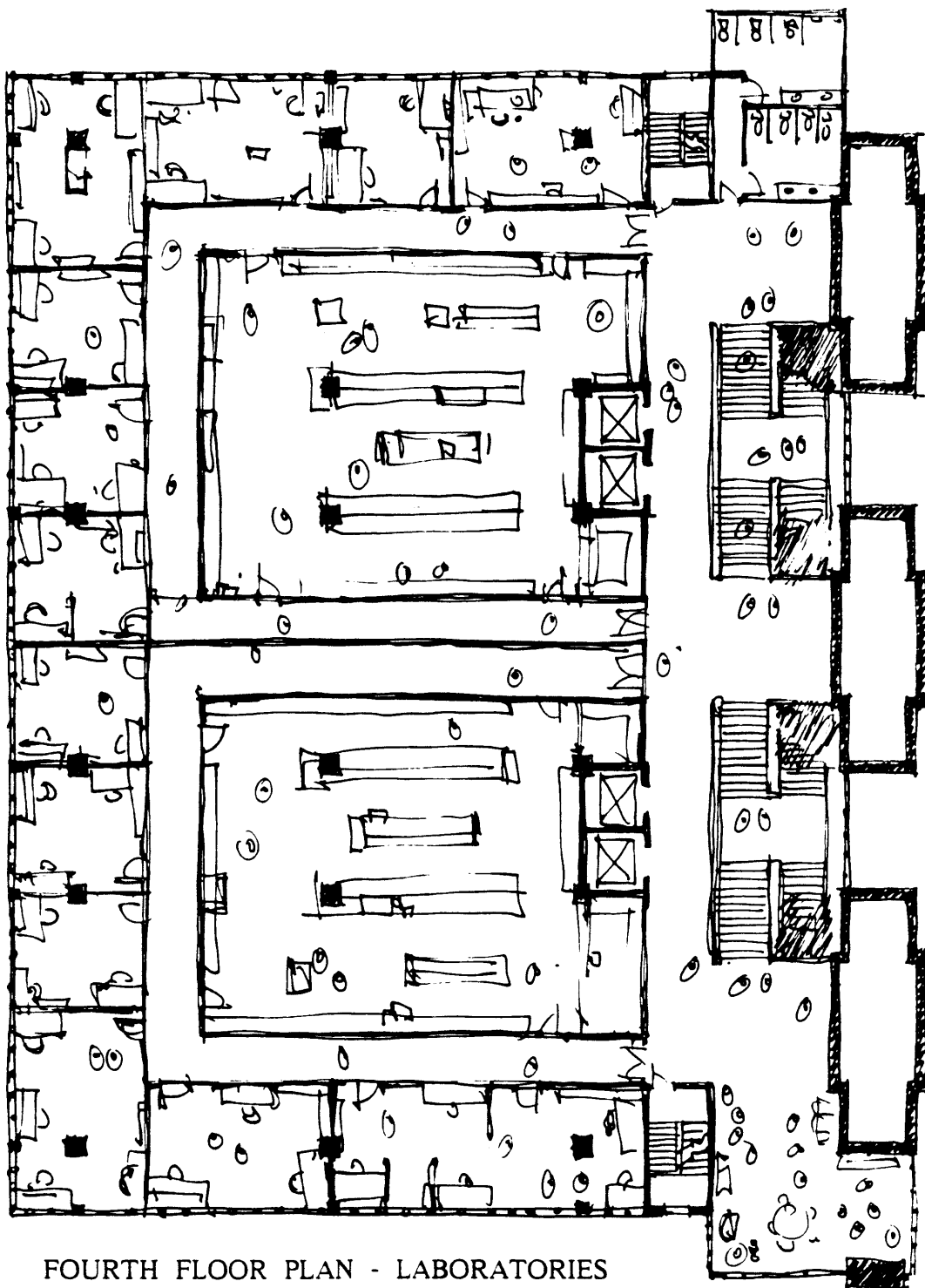
SECOND FLOOR PLAN - BANKERS



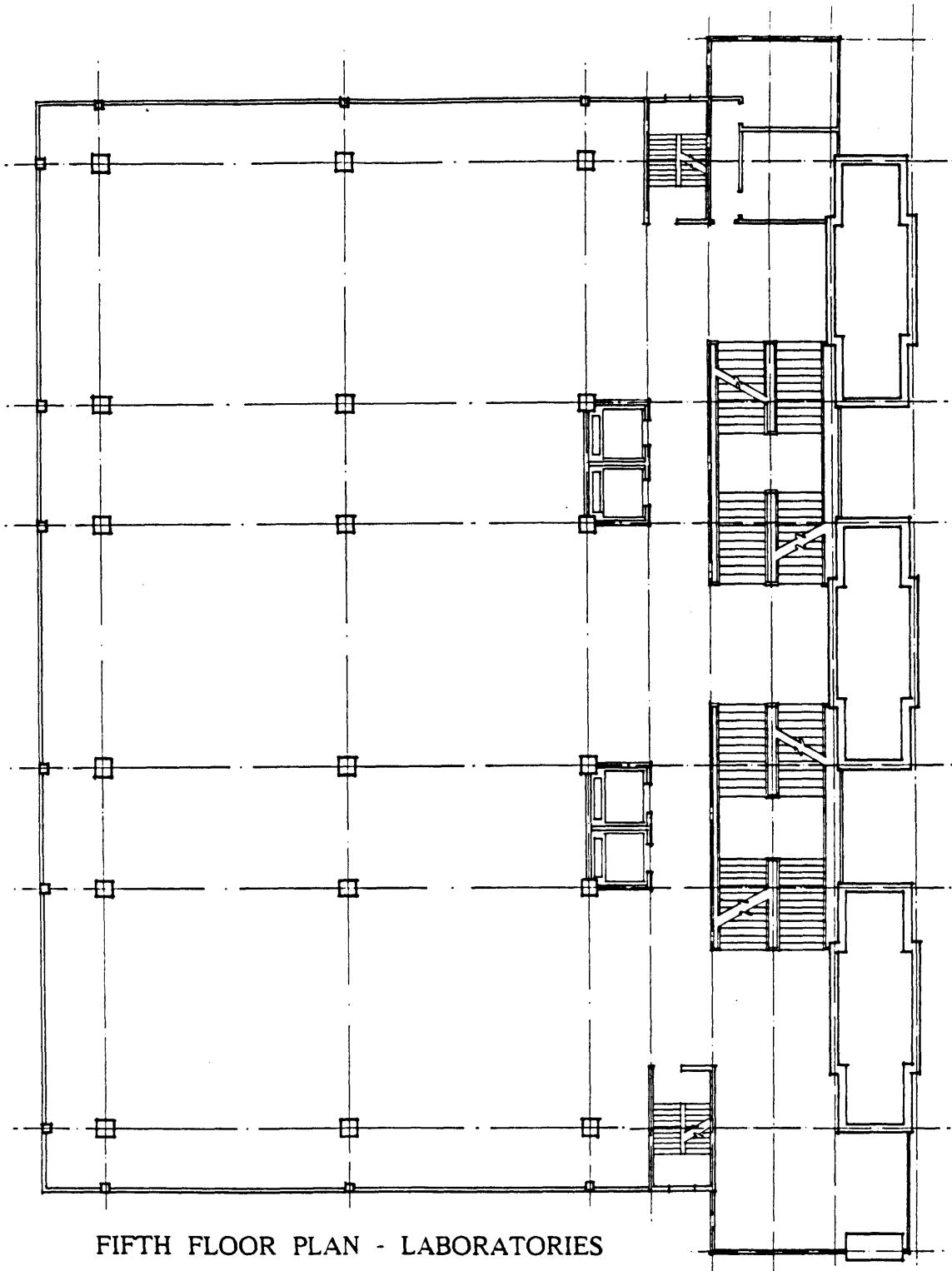


THIRD FLOOR PLAN - BROKERS

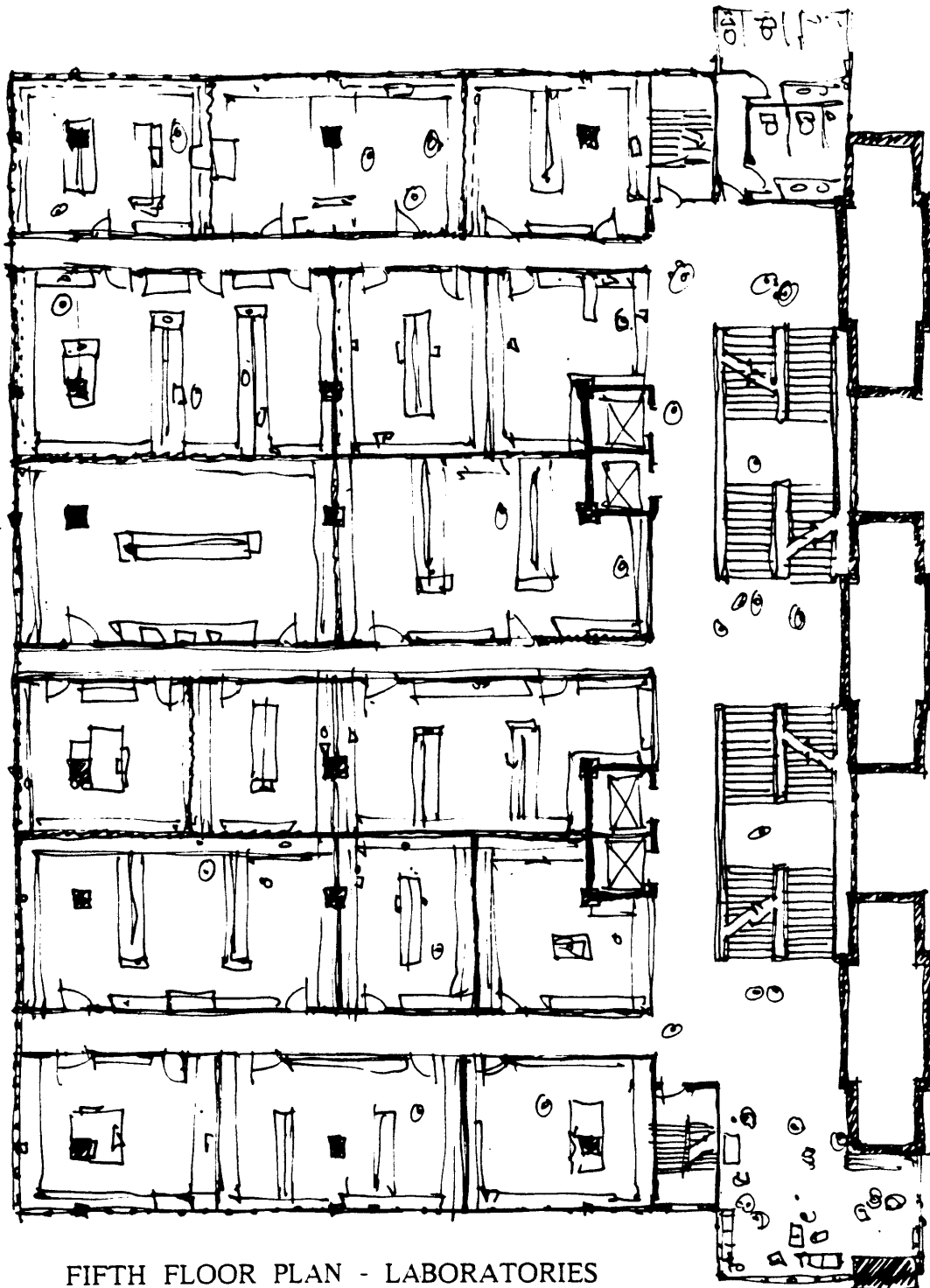




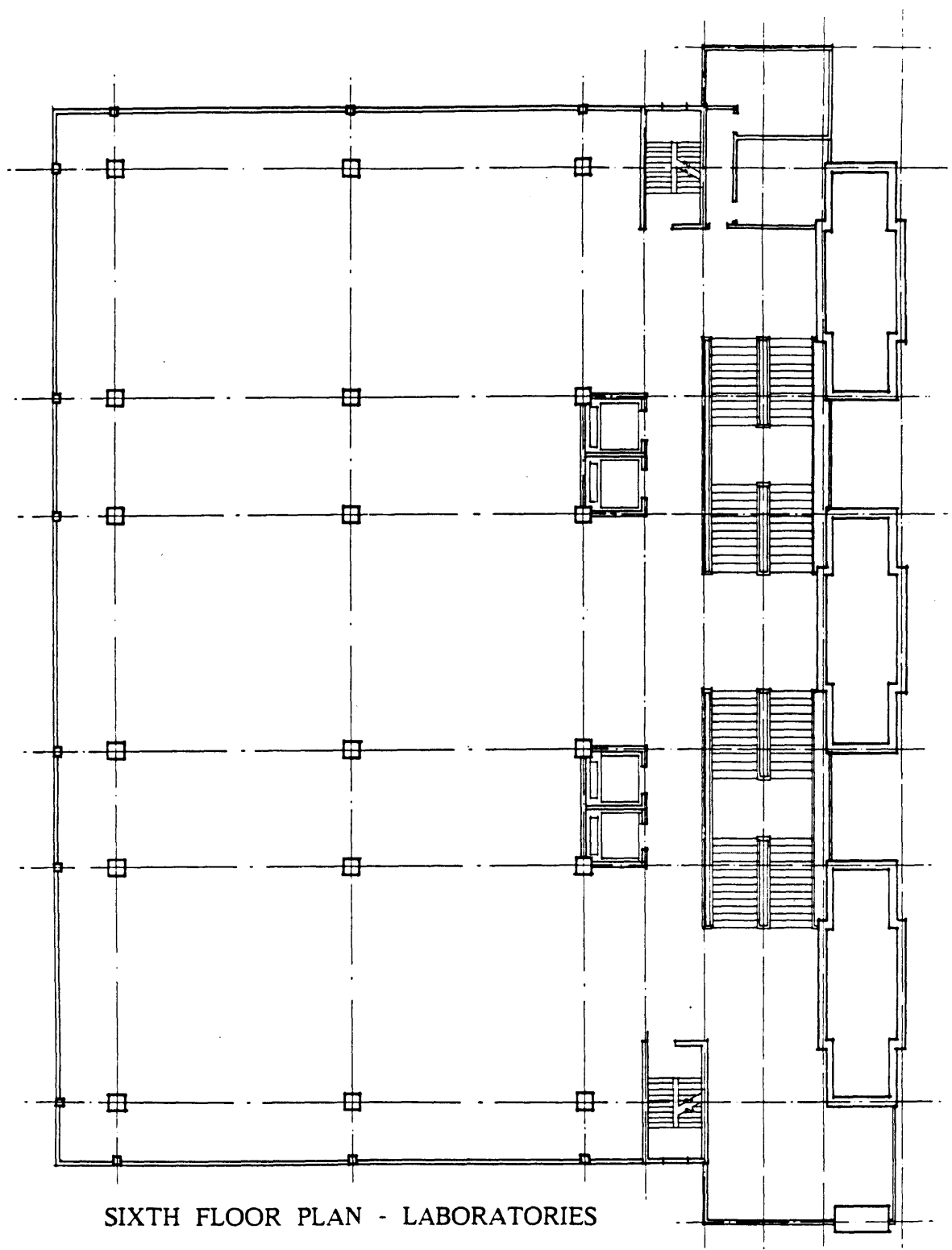
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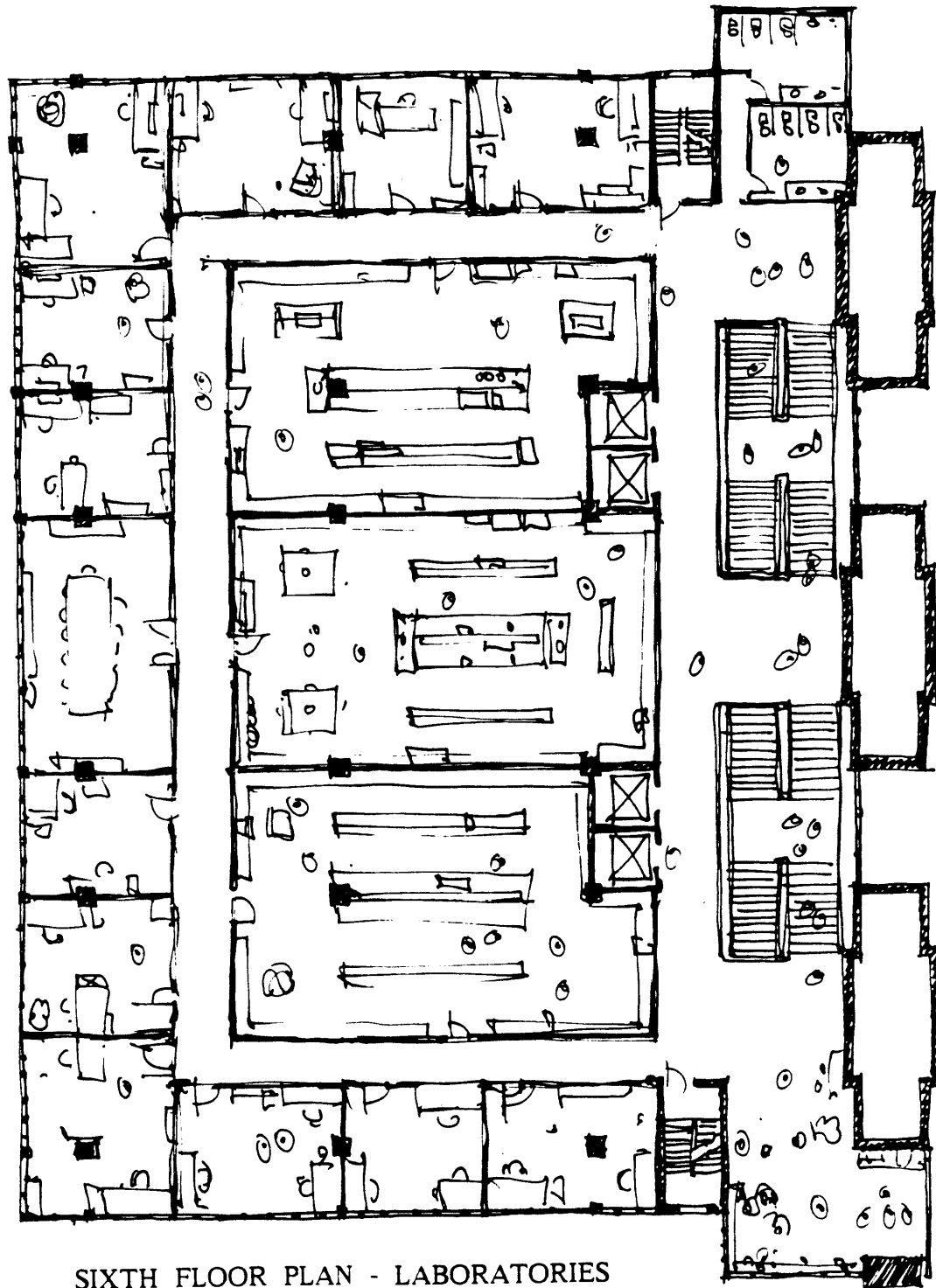


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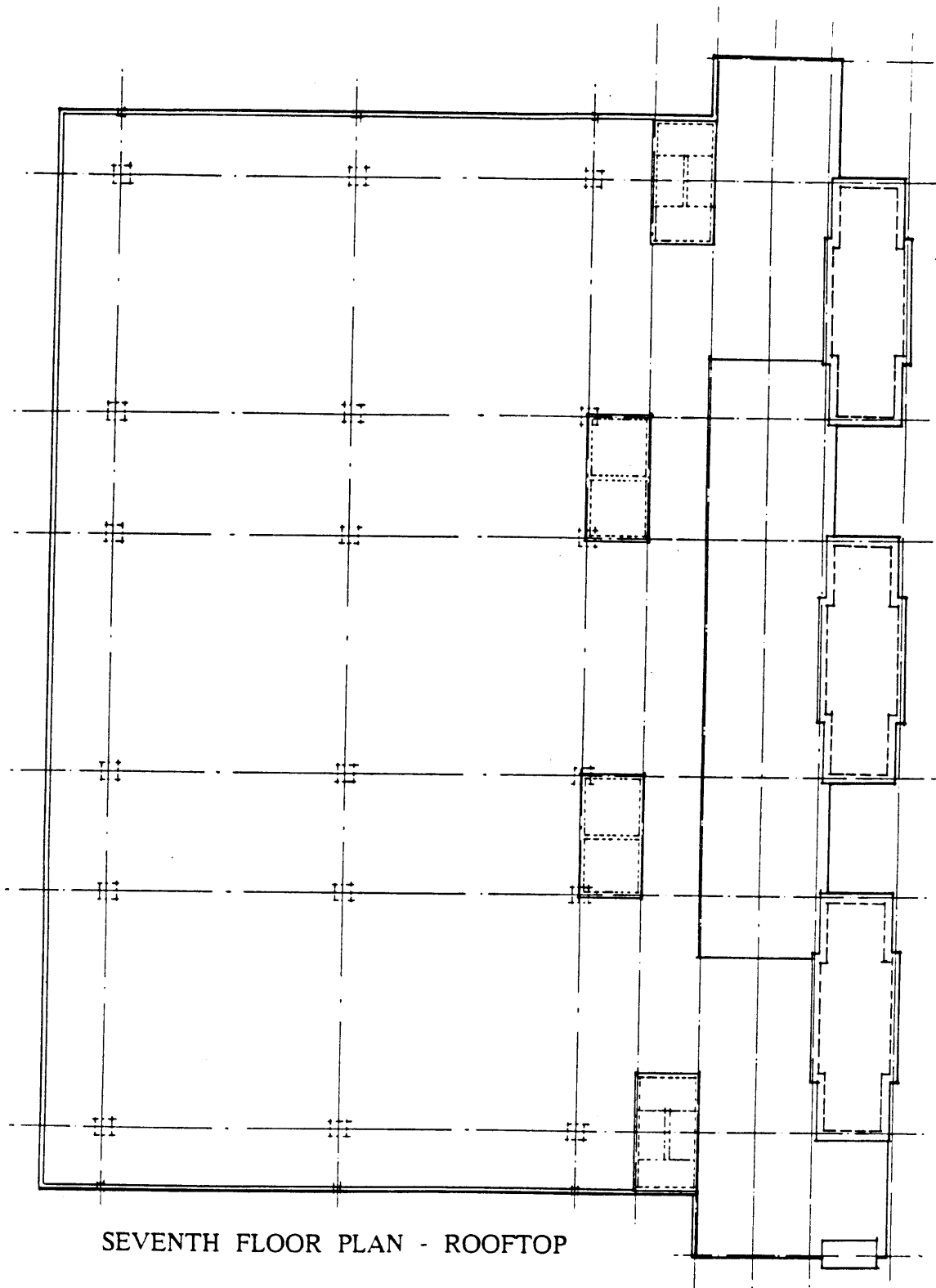


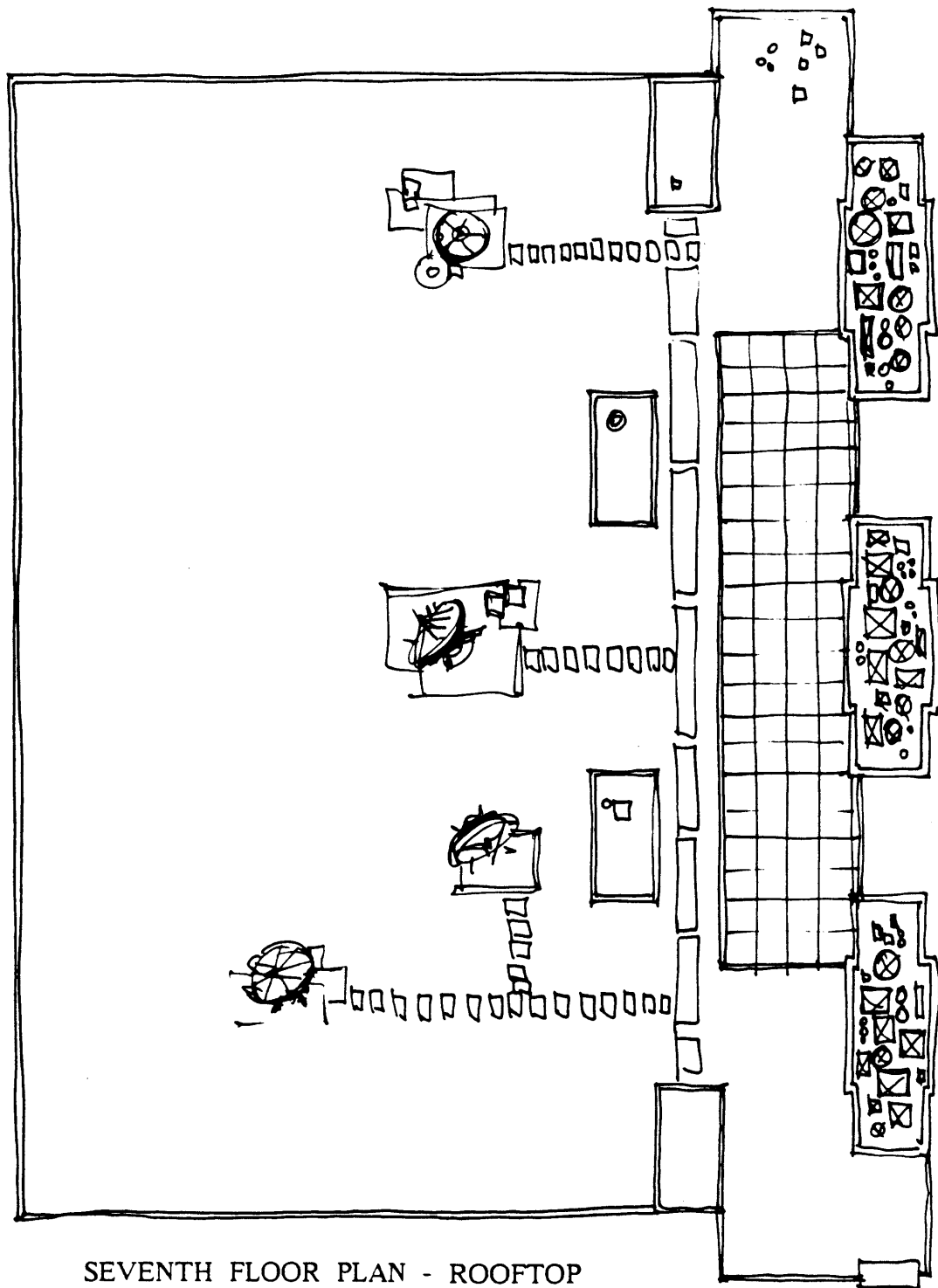
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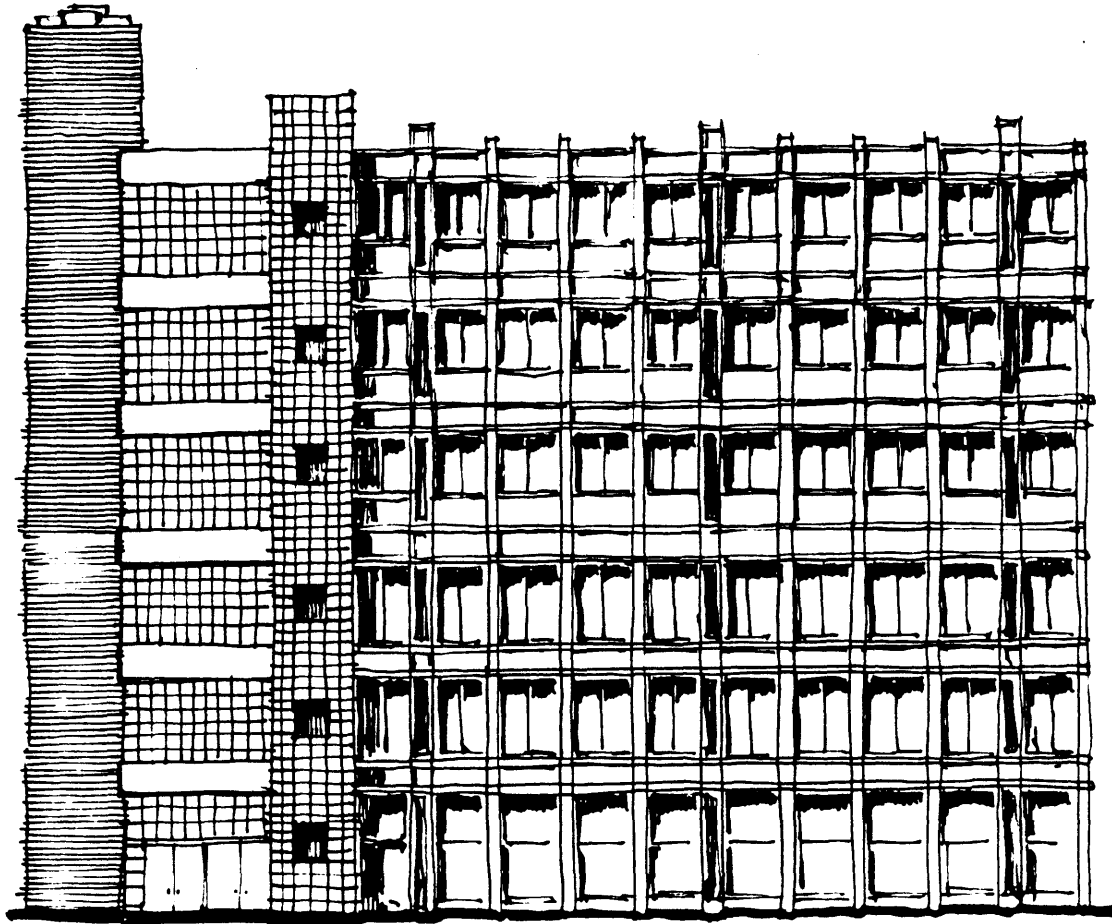


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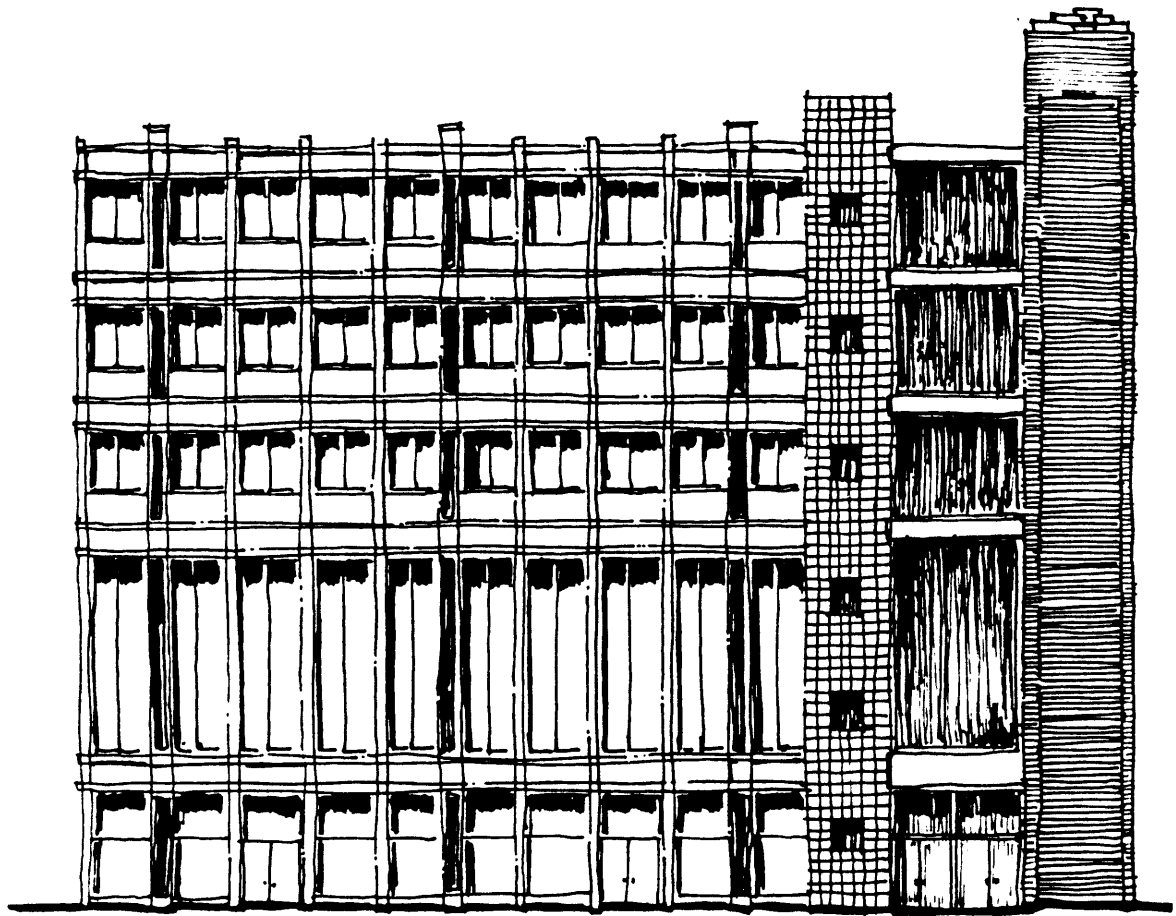




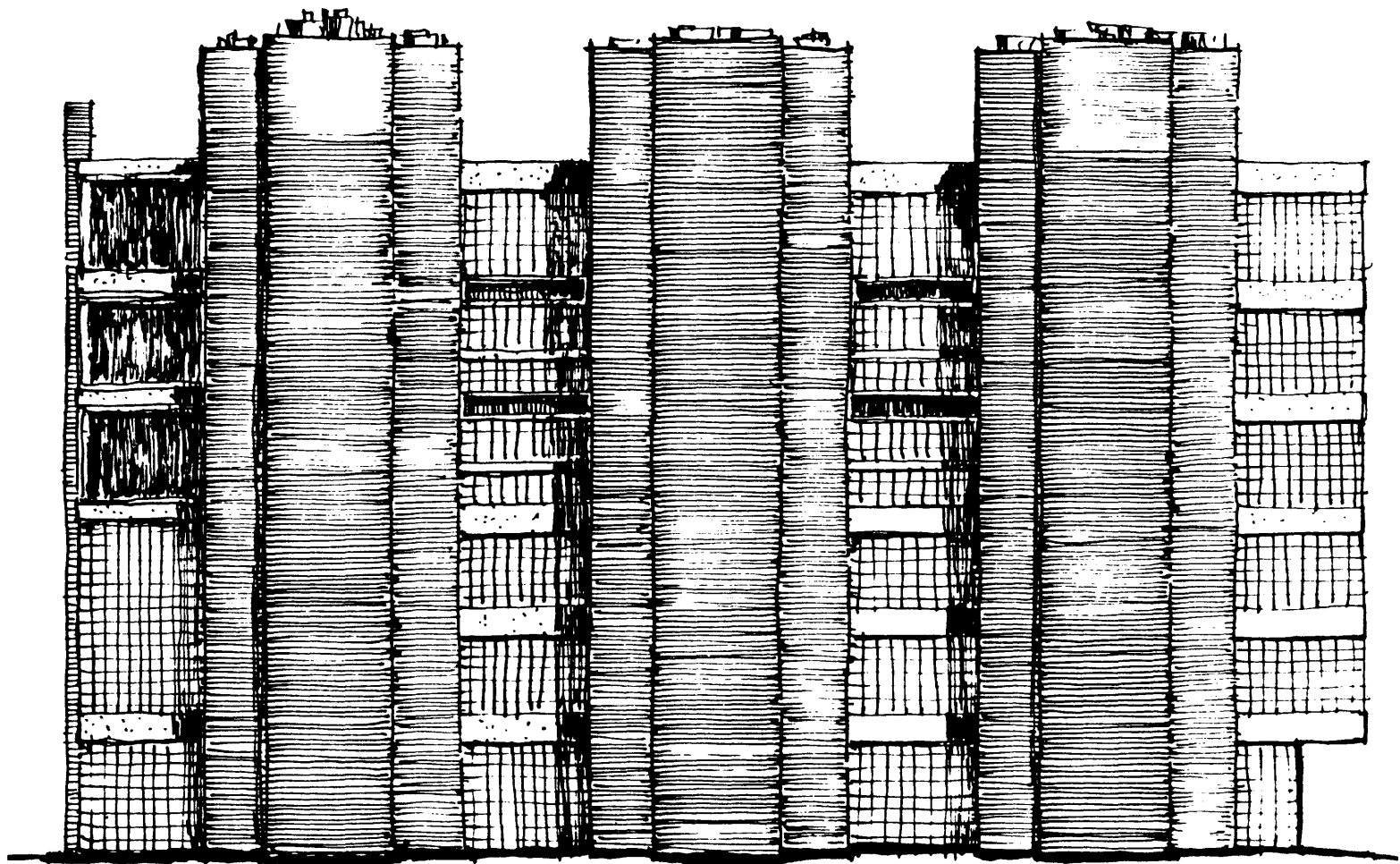
SEVENTH FLOOR PLAN - ROOFTOP



SOUTH ELEVATION

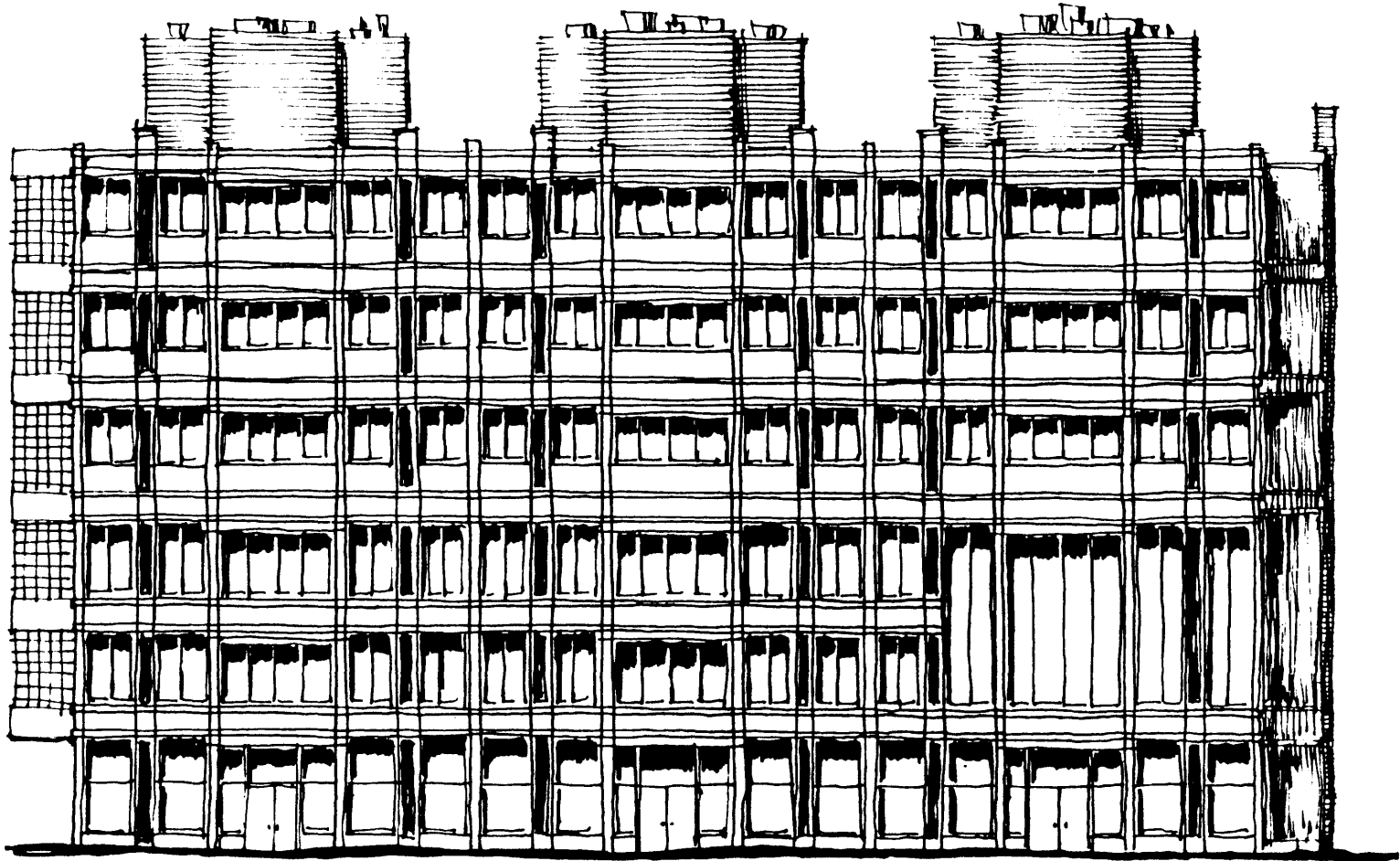


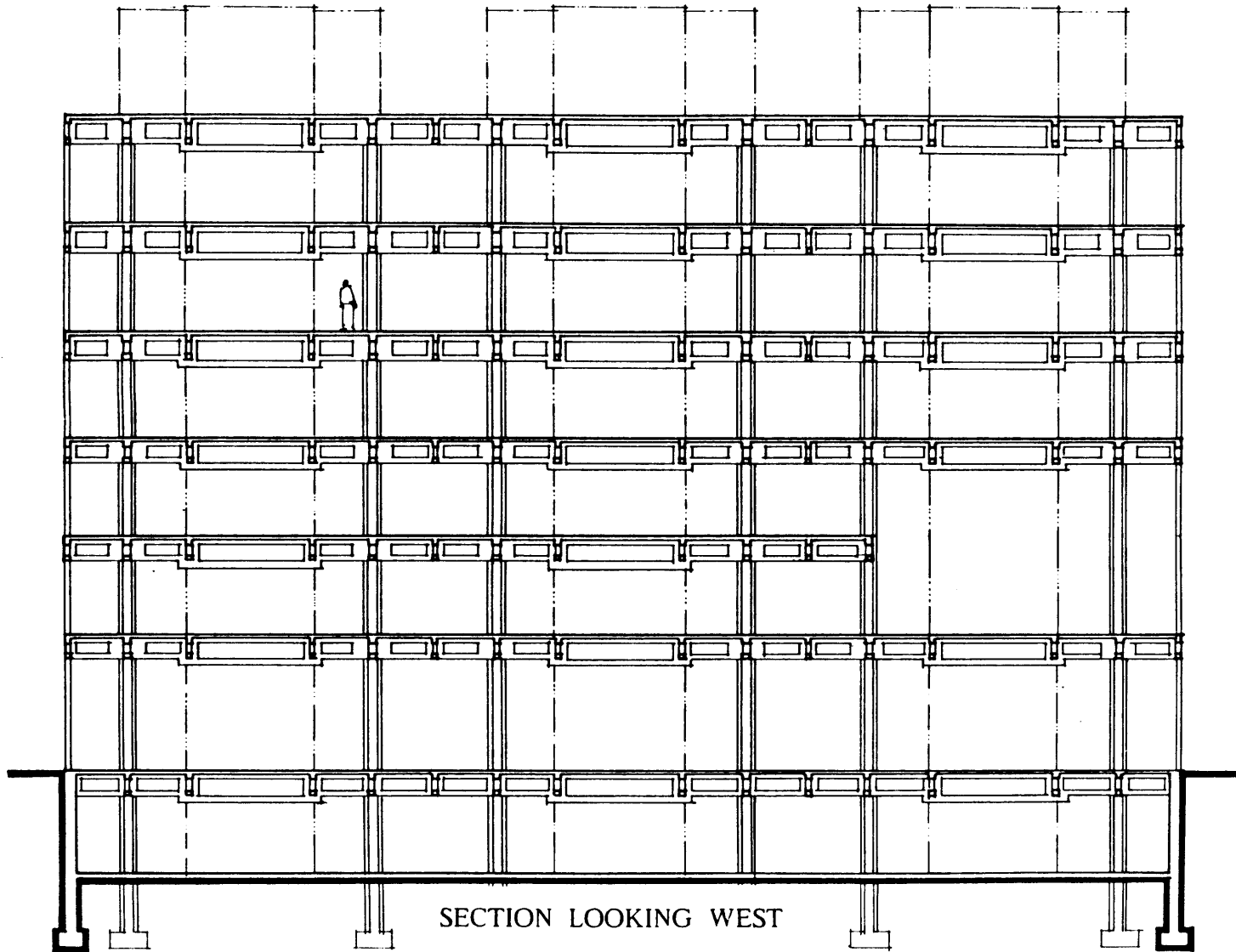
NORTH ELEVATION

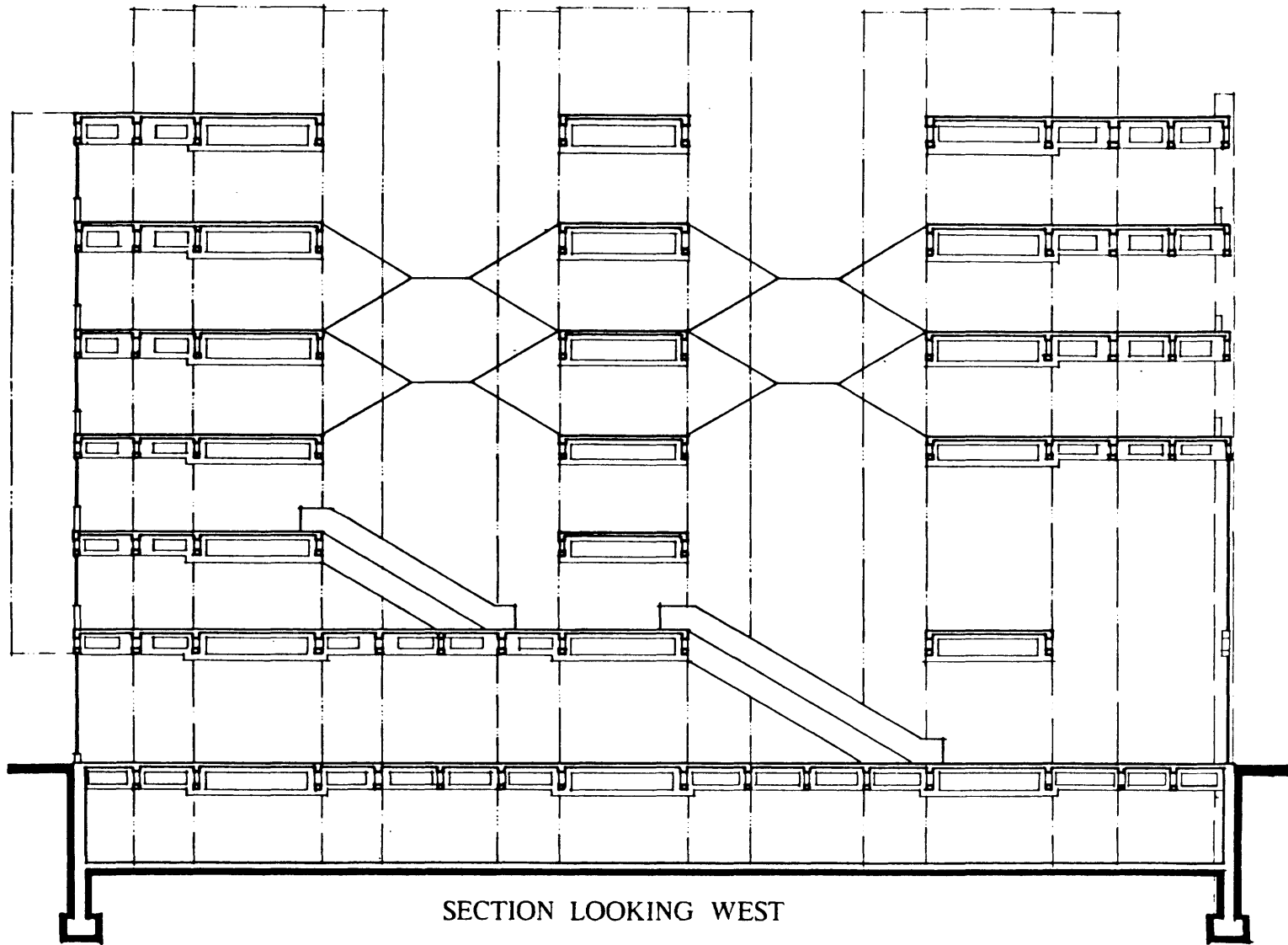


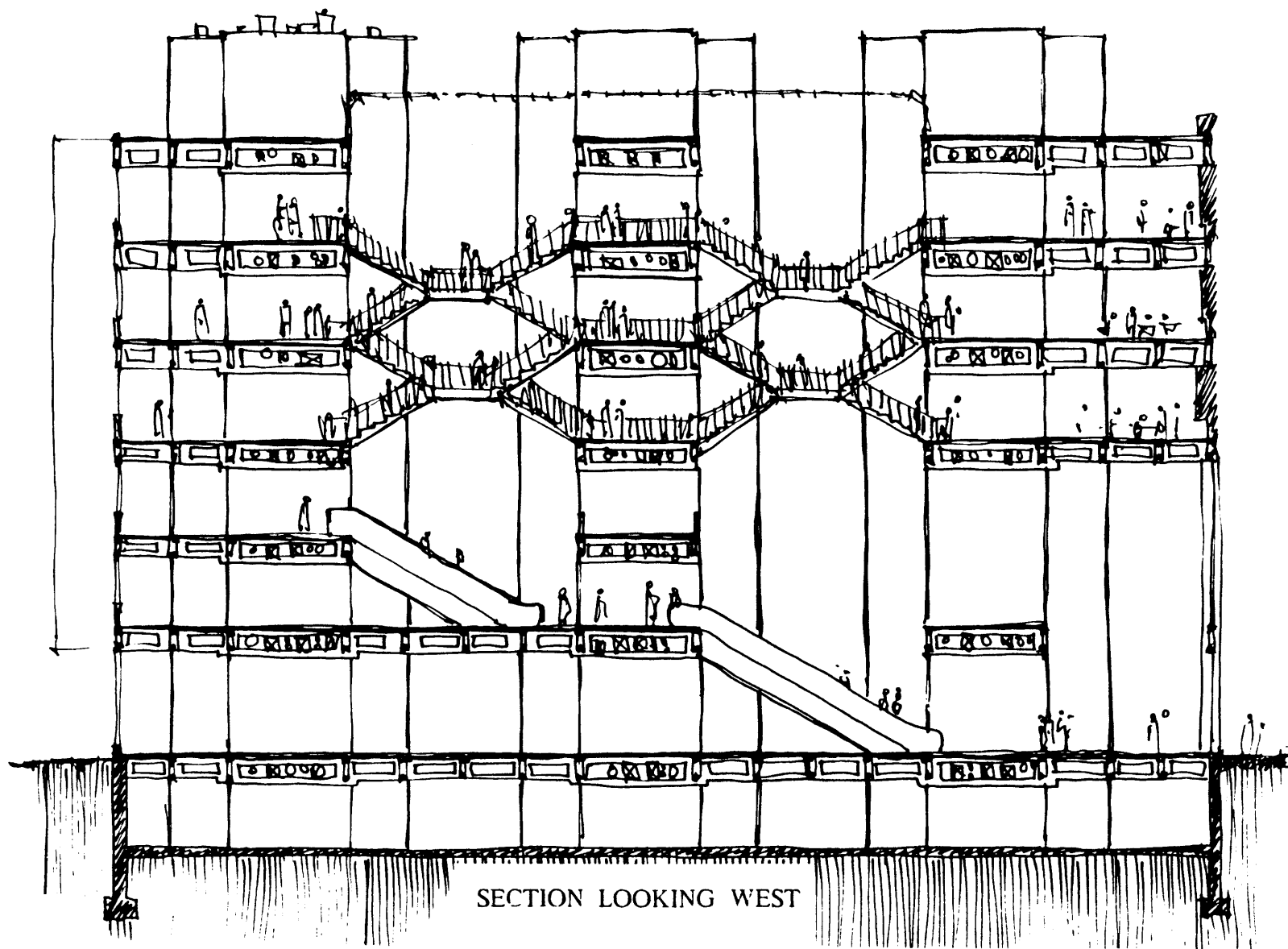
WEST ELEVATION

EAST ELEVATION



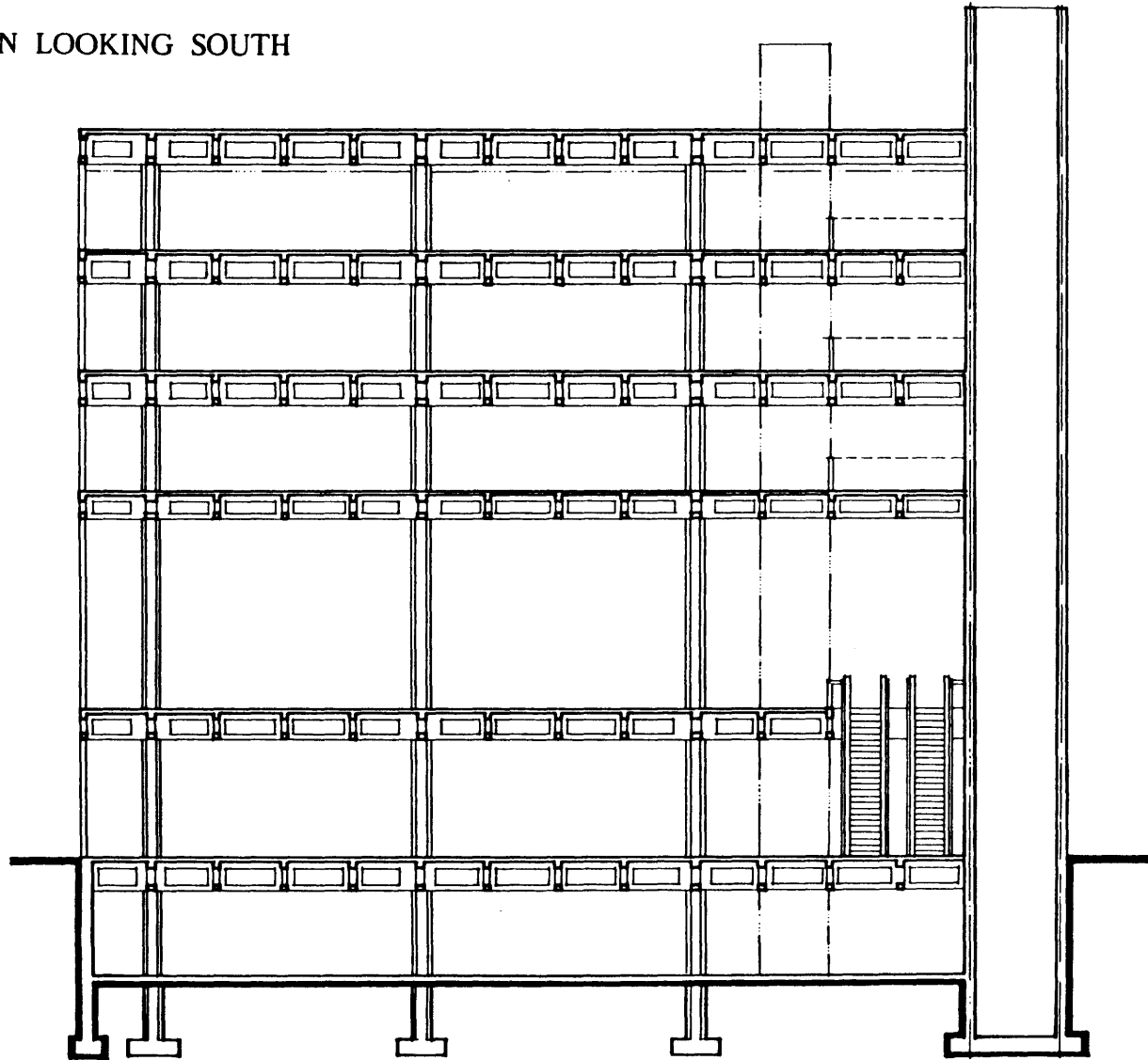




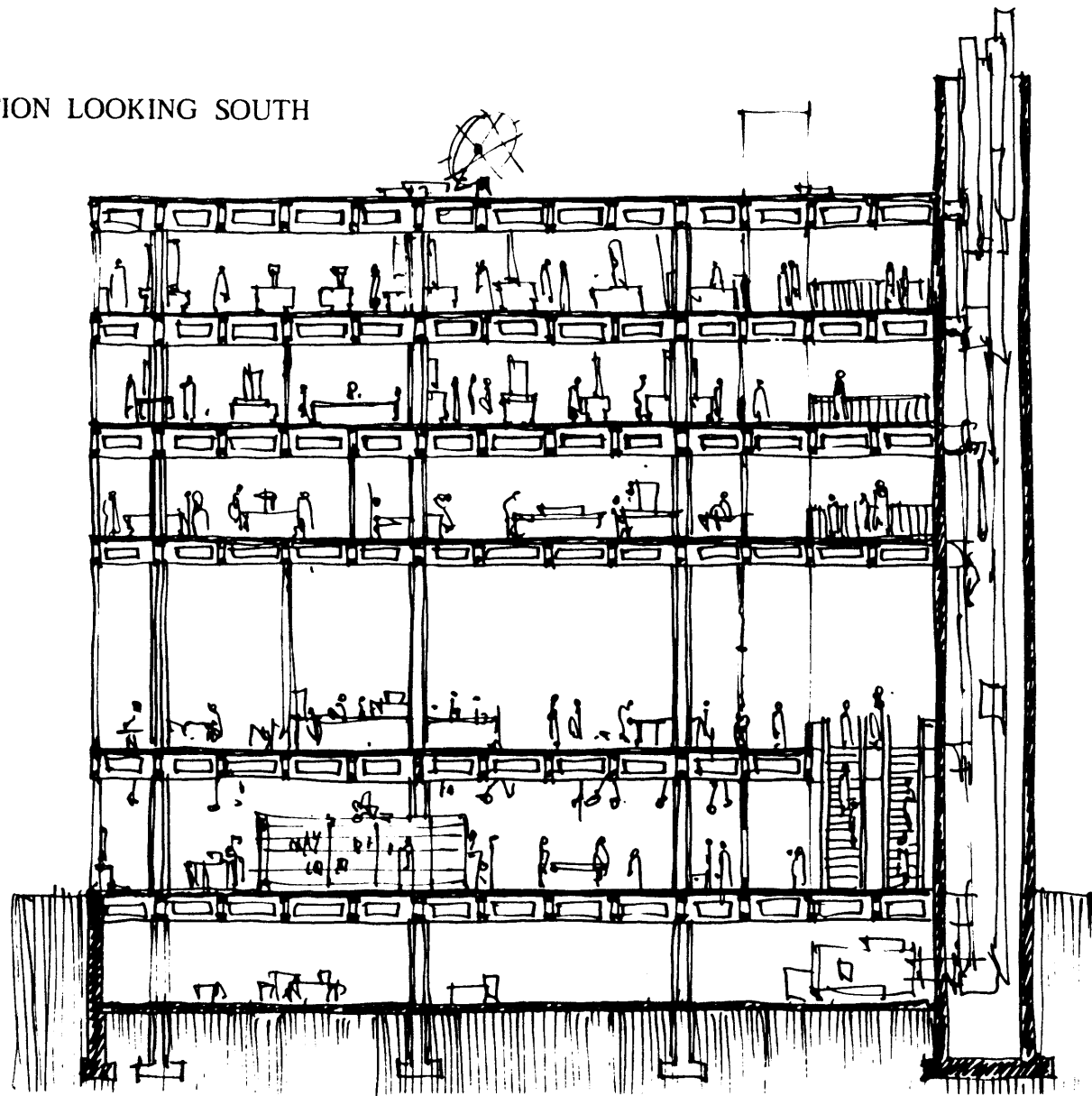


SECTION LOOKING WEST

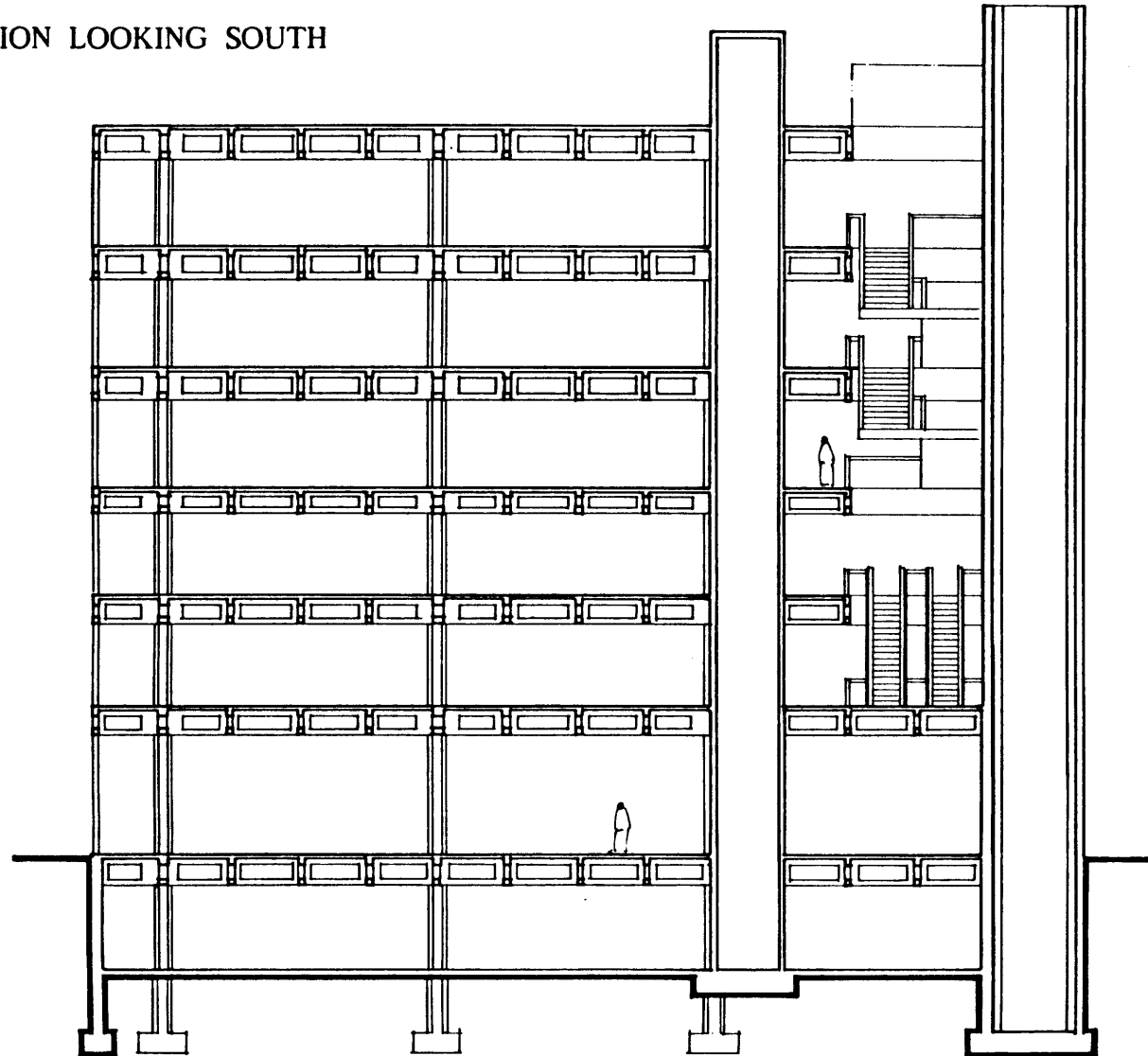
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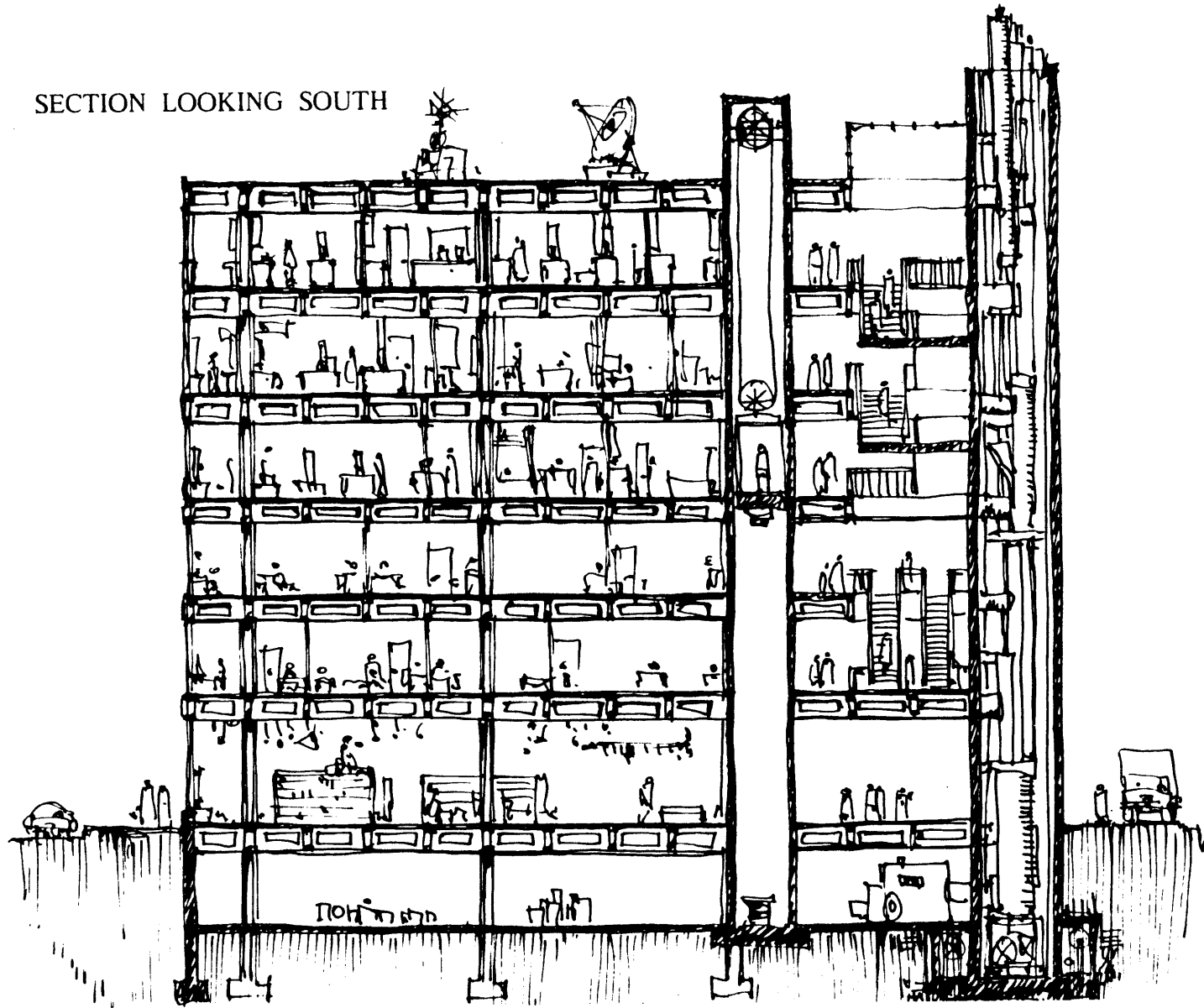
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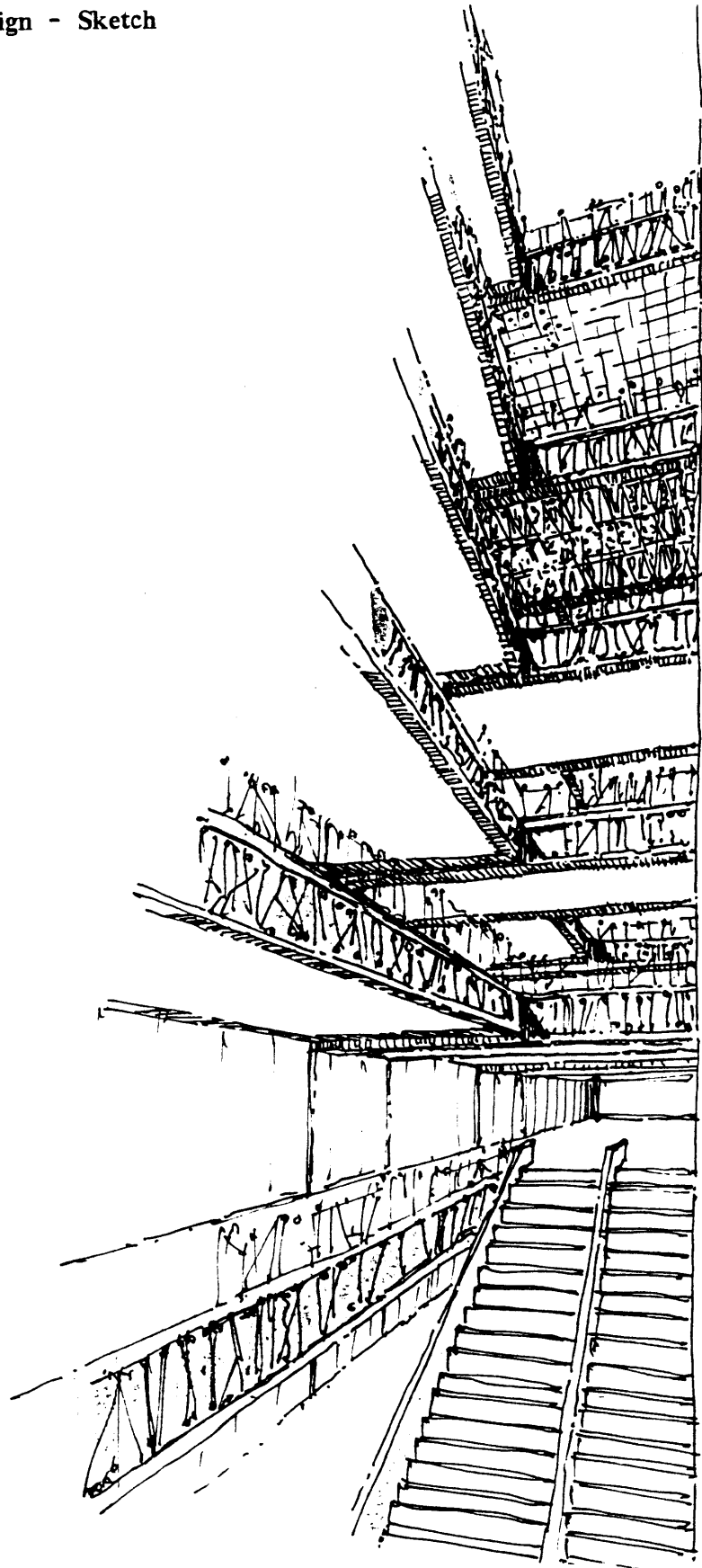
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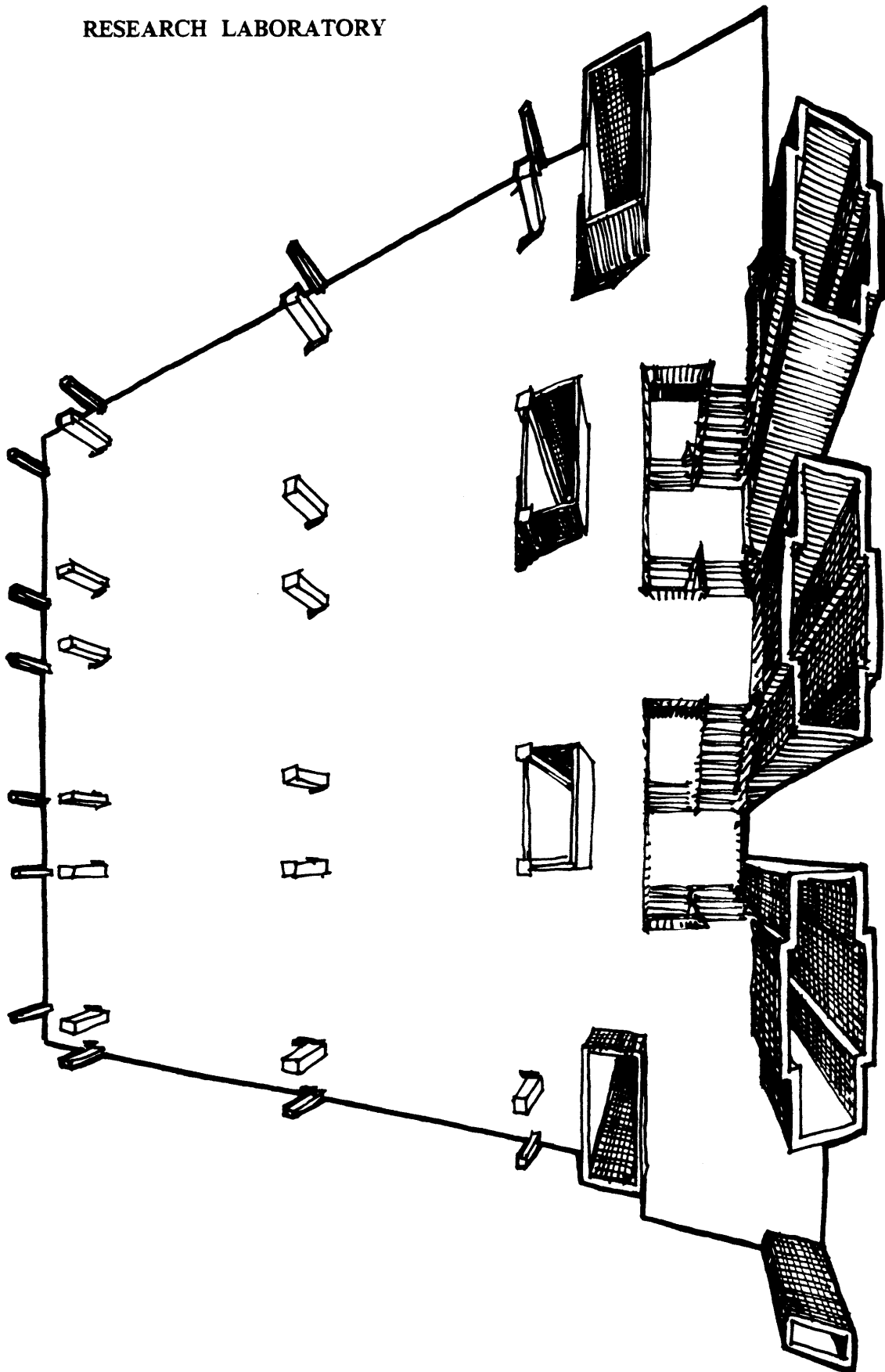
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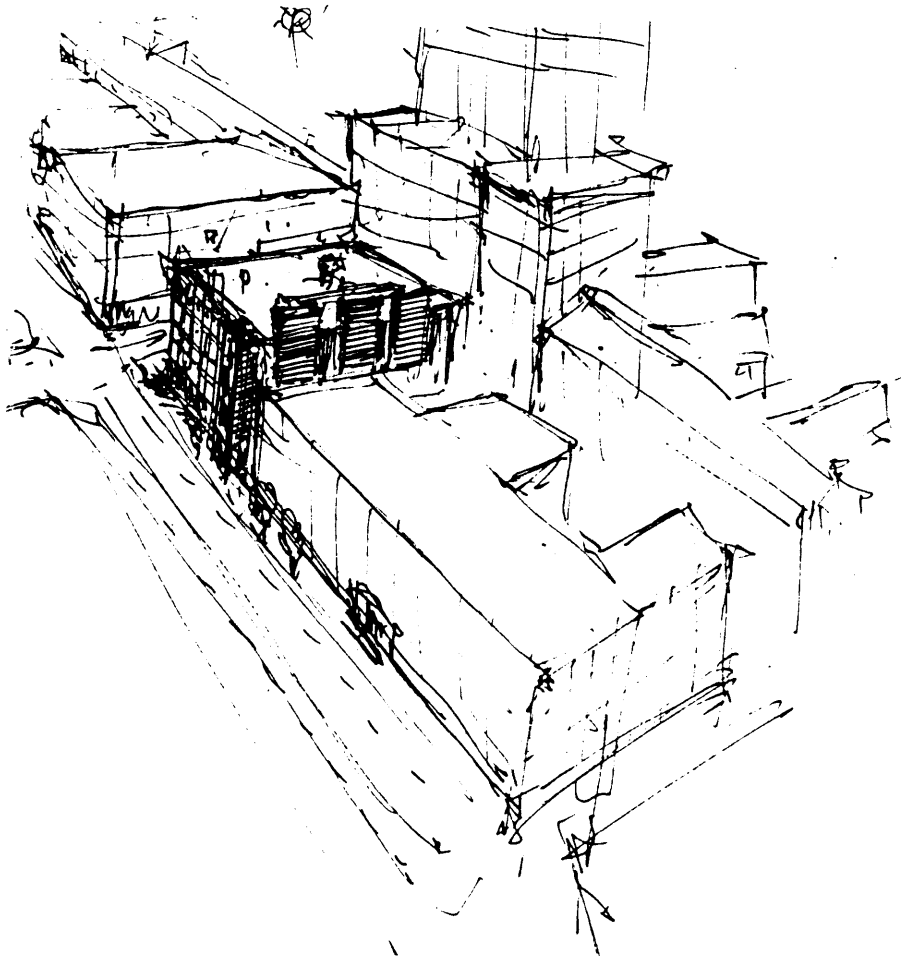


Final Design - Sketch

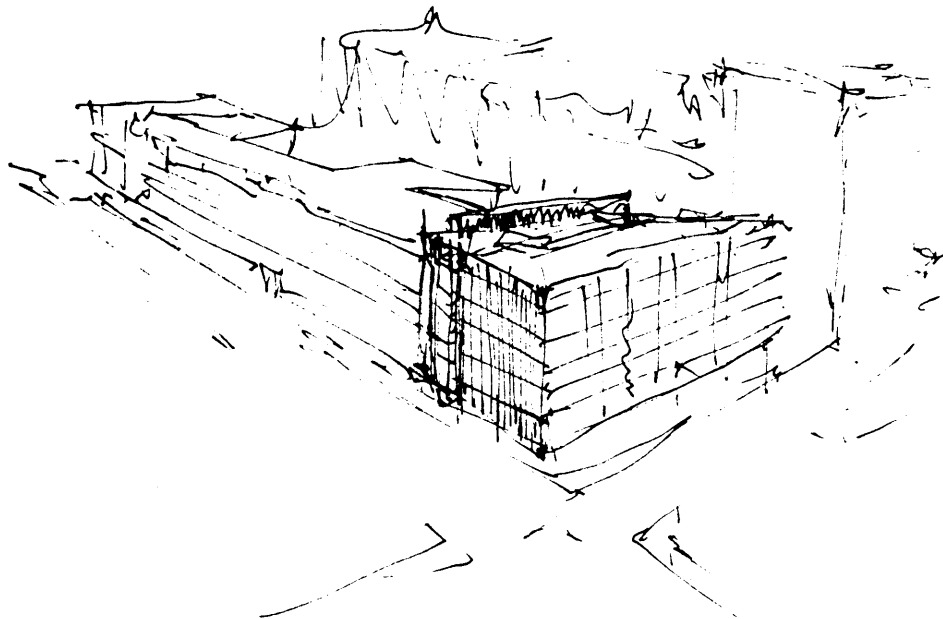


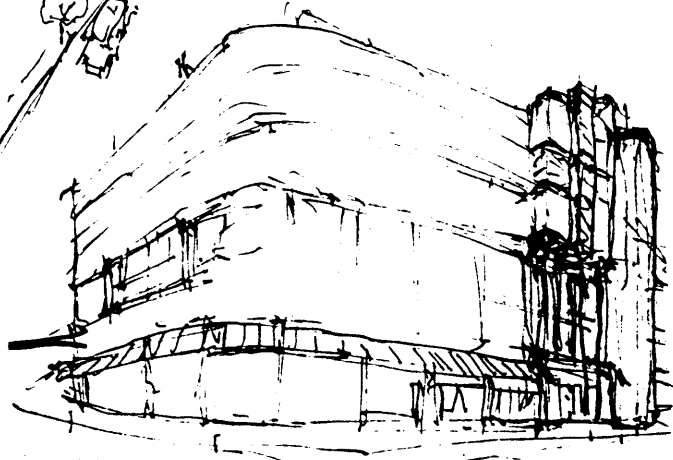
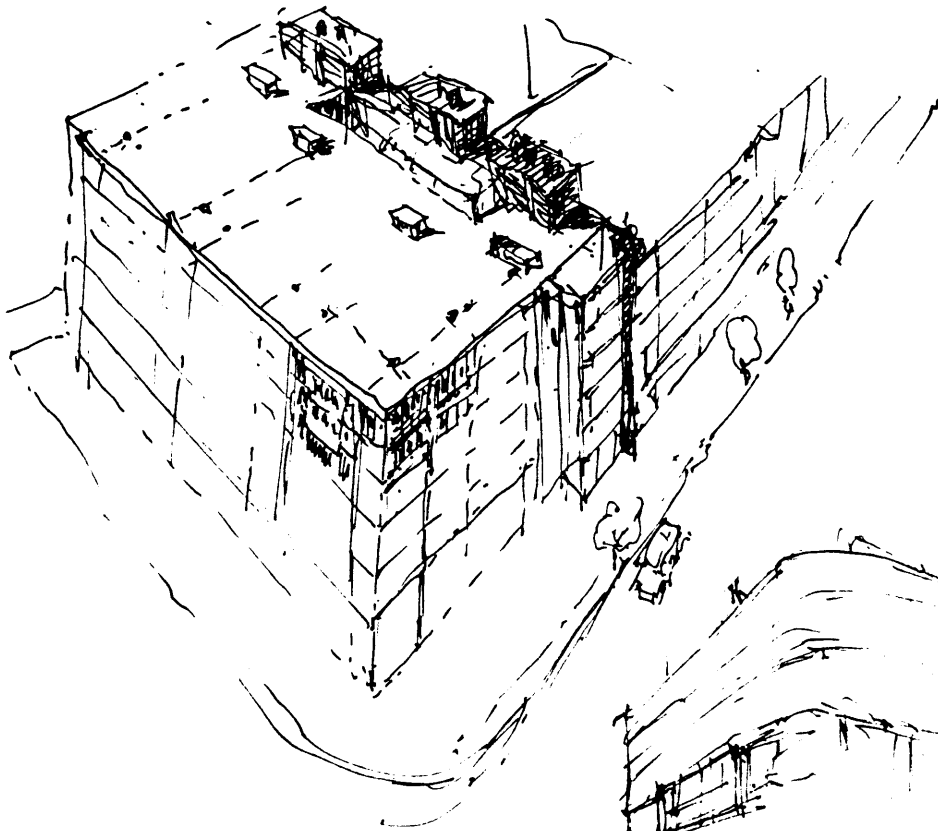
RESEARCH LABORATORY



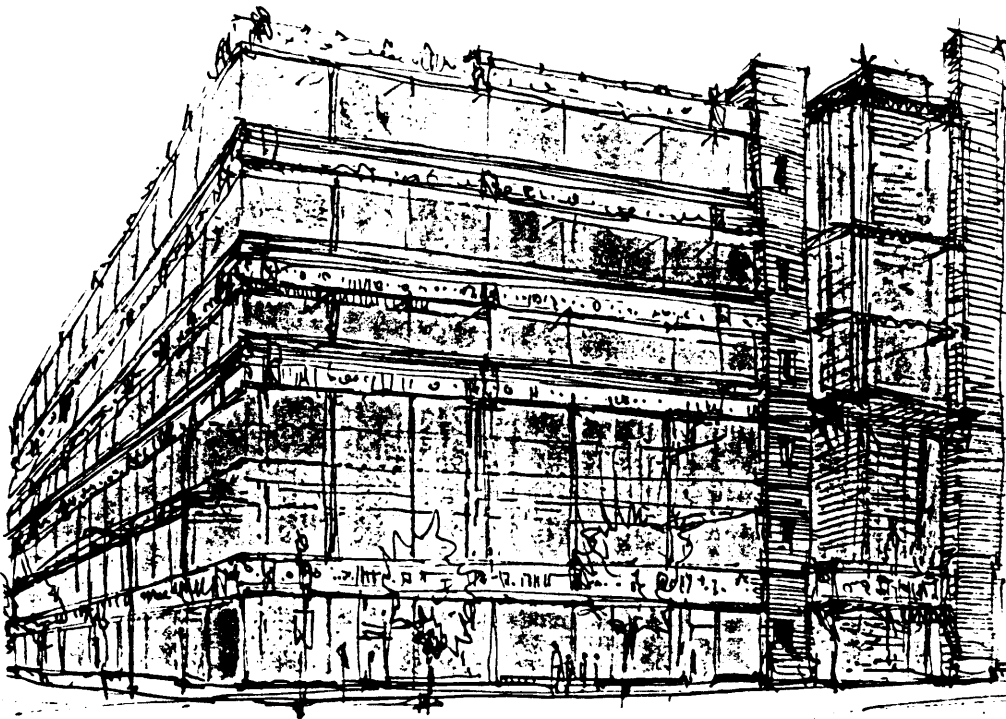


Final Design - Sketches





Final Design - Sketches



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